User Guide

InV2

Satellite Radio

Congratulations on the Purchase of your new SIRIUS InV2 Satellite Radio

Your new SIRIUS InV2 Satellite Radio lets you enjoy SIRIUS® Satellite Radio's digital entertainment in any vehicle.

Use this manual to familiarize yourself with all of your InV2's features and capabilities. For the latest information about this and other SIRIUS products and accessories, visit http://www.sirius.com.

SIRIUS®
SATELLITE RADIO
THE BEST RADIO ON RADIO™

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Warning and Safety Information

FCC Information

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a CLASS B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and the receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Canadian Compliance

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

General Precautions

Liquid Crystal Precautions

If the LCD screen on the radio is damaged, do not to touch the liquid crystal fluid. If any of the following situations happen, take the action indicated:

1. If the liquid crystal fluid comes in contact with your skin, wipe the skin area with a cloth and then wash the skin thoroughly with soap and running water.
2. If the liquid crystal fluid gets into your eye, flush the eye with clean water for at least 15 minutes. Seek medical care.
3. If the liquid crystal fluid is ingested, flush your mouth thoroughly with water. Drink large quantities of water and induce vomiting. Seek medical care.

Safety Precautions

Be sure to observe the following warnings. Failure to follow these safety instructions and warnings may result in a serious accident.

- Do not operate your InV2 in a way that might divert your attention from driving safely. As a driver, you alone are responsible for safely operating your vehicle in accordance with traffic safety laws at all times.

- Do not install the unit where it may obstruct your view through the windshield, or of your vehicle's indicator displays.
- Do not install the unit where it may hinder the function of safety devices such as an airbag. Doing so may prevent the airbag from functioning properly in the event of an accident.
- Be sure the unit is installed as described in the installation instructions which accompany each accessory kit. SIRIUS Satellite Radio is not responsible for issues arising from installations which were not installed according to the instructions.
- To avoid short circuits, do not open the unit, and never put or leave any metallic objects (coins, tools, etc.) inside the unit.
- If the unit emits smoke or unusual odors, turn the power off immediately, and disconnect the unit from any power source.
- Do not drop the unit or subject it to strong shocks.
- If the unit doesn't seem to be working properly, turn the unit off, wait 10 seconds and then turn it on again.
- The installation and use suggestions contained in this manual are subject to any restrictions or limitations that may be imposed by applicable law. The purchaser should check applicable law for any restrictions or limitations before installing and/or operating this unit.
- Do not install the FM Extender Antenna where it will hinder or block your view. In some states it may be illegal to mount it on the windshield of your vehicle. Check applicable law for any restrictions or limitations before installing the FM Extender Antenna on your windshield.
- Do not install the FM Extender Antenna where it may hinder the function of safety devices such as an airbag. Doing so may prevent the airbag from functioning properly in the event of an accident.

Warnings

Notice To Drivers In California and Minnesota

State law prohibits drivers in California and Minnesota from using suction mounts on their windshields while operating motor vehicles. Other dashboard or friction mounting options should be used. SIRIUS does not take any responsibility for any fines, penalties, or damages that may be incurred as a result of disregarding this notice. (See California Vehicle Code Section 26708(a); Minnesota Statutes 2005, Section 169.71)

Operating Temperature

The InV2 is designed to operate between -20° to +85° C (-4° to +185° F). Avoid leaving the radio in a vehicle or elsewhere where the temperature may fall outside this range. Extreme temperatures or extreme temperature fluctuations can degrade the performance of the LCD display screen, and possibly damage it.

Cleaning and Maintenance

If the radio or accessories become dirty, turn the power off and wipe it clean with a soft cloth. Do not use hard cloths, strong cleaning fluids, paint thinner, alcohol, or other volatile solvents to clean. These may cause damage to the radio.

Cigarette Lighter Adapter

The radio cannot be powered directly from a vehicle's 12VDC power system. It must be powered from the vehicle's cigarette lighter or similar power port using the included Cigarette Lighter Adapter or an equivalent DC power adapter (see your local electronics dealer). Connecting the radio directly to the vehicle's 12VDC power system may result in damage to the SIRIUS radio.

Copyrights & Trademarks

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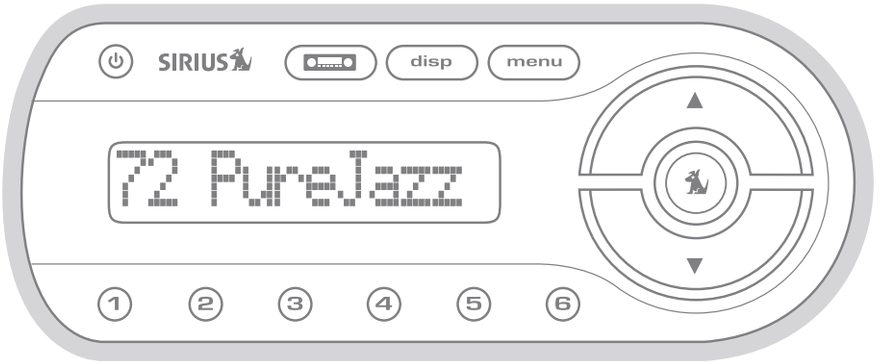
Portions of the software on this radio are licensed under the eCos License. Distribution of eCos requires that the eCos source code be made available to SIRIUS Satellite Radio customers. The eCos License and eCos source code are available to the public at http://www.sirius.com/ecoslicense.

SIRIUS Satellite Radio reserves all rights to all radio software not covered under the eCos license. This includes all portions of radio software that were not distributed to SIRIUS as part of the eCos operating system.

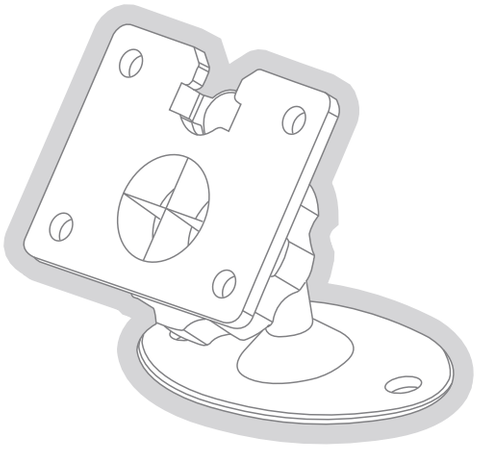
Hardware, subscription and activation fee required. For full Terms & Conditions, visit http://sirius.com. Prices and programming are subject to change. Not available in HI and AK. Equipment and subscription sold separately. Installation required with some equipment.

Package Contents

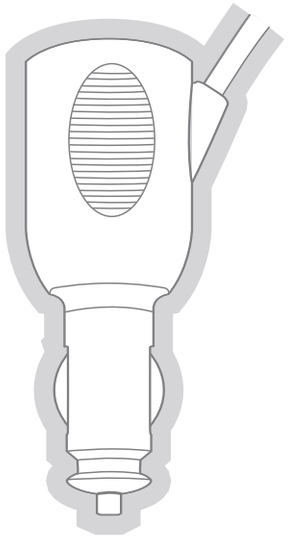
The following items are included with your purchase of the SIRIUS InV2 Satellite Radio:



SIRIUS InV2 Radio



Adhesive Dash Mount

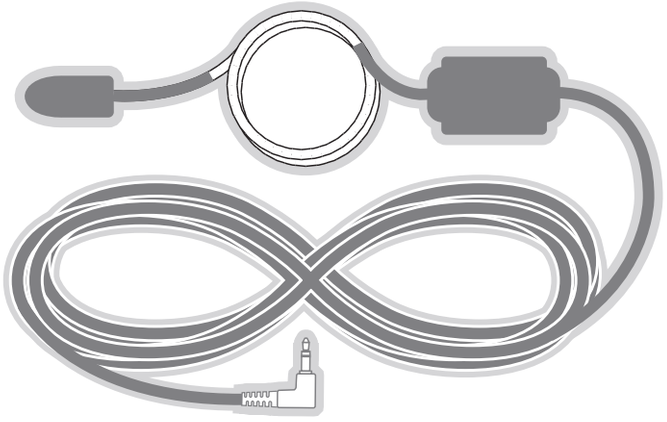


Cigarette Lighter Adapter

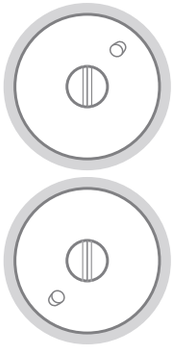
Magnetic Antenna

Antenna Cover/Tail

Alcohol Swab



FM Extender Antenna



Suction Cups (2)

Self Adhesive Cable Guides (3)

Unpack your SIRIUS InV2 radio carefully and make sure that everything shown is present. If anything is missing or damaged, or if your the radio fails to operate, notify your dealer immediately. We recommend that you retain the original carton and packing materials in case you need to ship your radio in the future.

Installation

SIRIUS suggests that you have your InV2 professionally-installed in your vehicle. Professional installation provides an experienced technician to install this product in your vehicle, advice for selecting a suitable mounting location for the Dash Mount, installation of the antenna, and proper routing of all the necessary wires and cables. If the locations of your SIRIUS radio and your vehicle's FM antenna make the performance the SIRIUS radio's built-in FM transmitter within your vehicle poor, a professional installer will have the necessary accessories to install an optional FM Direct Adapter or audio cable to connect your InV2's audio output directly to your vehicle's audio system. Ask your SIRIUS retailer if they provide professional installation services, or can recommend a professional installation service.

Location

When installing the Dash Mount in your vehicle, choose a location in your vehicle where it will not block your vision, interfere with the vehicle controls, or obstruct the air bag. The location should be easily accessible and provide good visibility of the display, and should not be located where it will be in direct sunlight which will affect the visibility of the display screen.

Figure 1 shows two examples of the InV2 mounted on a vehicle's dashboard. **A** is left of the steering wheel; **B** is right of the wheel.

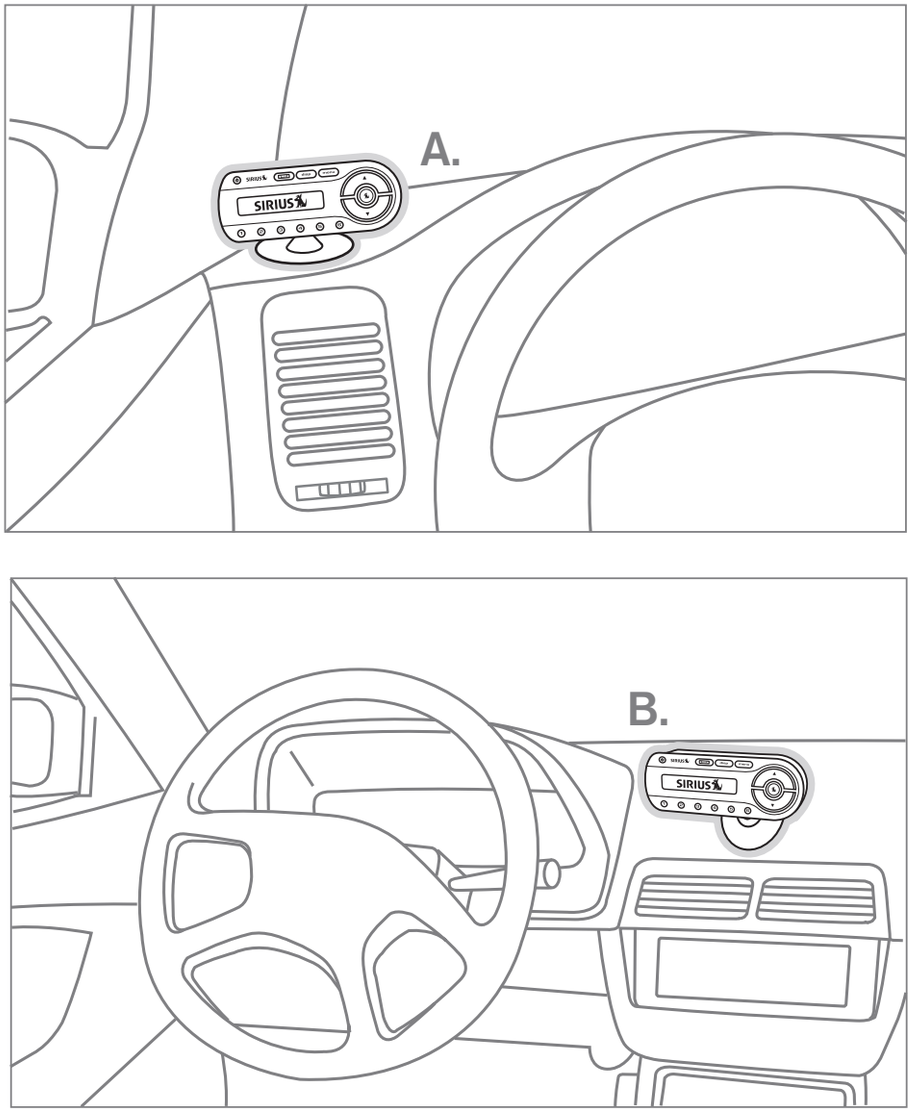


Figure 1

Attaching the Adhesive Dash Mount

Select the mounting position carefully before adhering the mount to your vehicle. Once the mount has been adhered to a surface, it will not be possible to remove it and adhere it again.

Once you've selected a mounting location, clean the mounting surface area in the vehicle with the provided alcohol swab. Peel the protective material off the adhesive on the foot and press the foot firmly against the vehicle surface (see *Figure 2*).

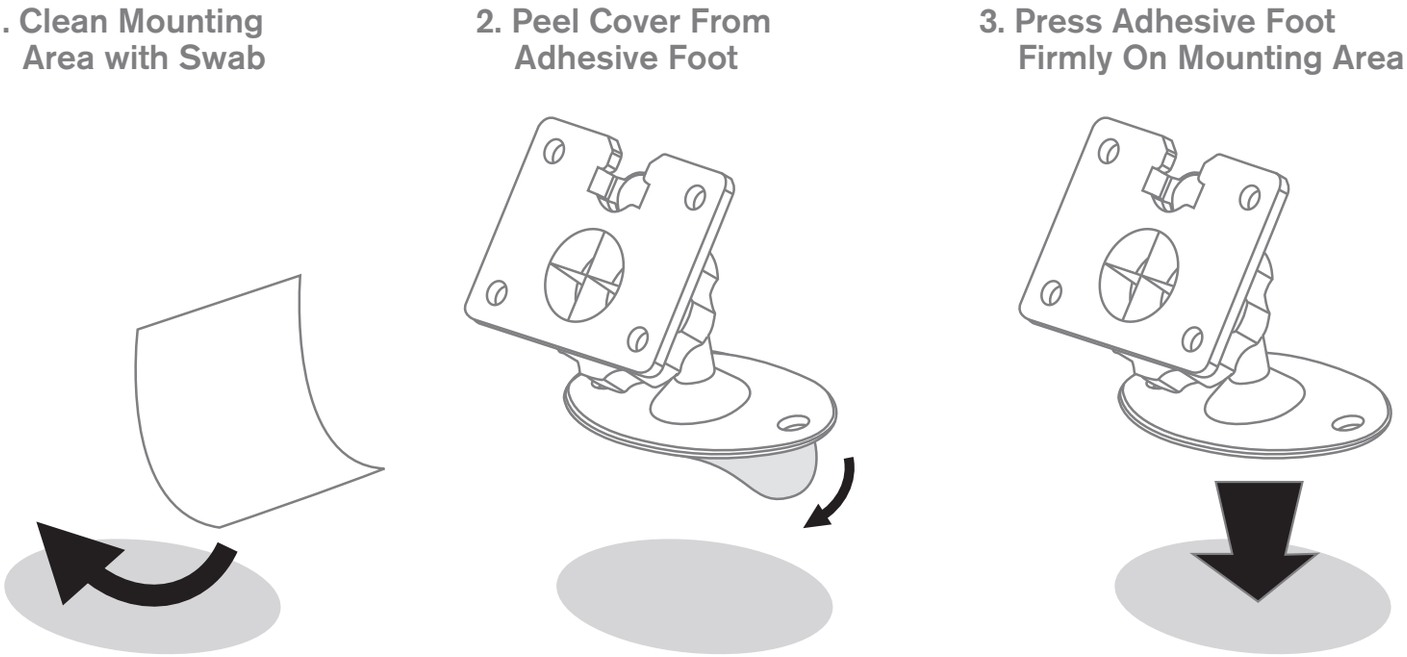


Figure 2

Allow the adhesive to adhere for a minimum of 2-4 hours before using the mount. The best adhesion occurs after 24 hours.

Installing the Magnetic Antenna

Caution

Because adhesive is used in the installation of the Rubber Antenna Cover/Tail, we recommend that you install the antenna at or above room temperature (68° F). The adhesive on the Rubber Cover/Tail may not adhere properly to the vehicle roof at temperatures lower than this. Warmer temperatures will also make it easier to route of the antenna cable through the rubber molding around the windows and in other areas in the vehicle. Maximum adhesion usually occurs within 72 hours at room temperature, so you should avoid car washes as well as other contact with the antenna and Rubber Cover/Tail during this 72 hour period.

Warning

Be sure not to cut, damage, or puncture the external jacket of the antenna cable during the installation procedure. Damage to the antenna cable can degrade the SIRIUS signal or make it unavailable, and can also cause water to intrude via the cable into the antenna causing the antenna to fail.

Do not lengthen or shorten the antenna cable by cutting it. Doing so will cause the antenna to not function properly.

Installation

Installing the magnetic antenna consists of two steps:

- Mounting the magnetic antenna and Rubber Antenna Cover/Tail on the vehicle
- Routing the antenna cable through the vehicle to the Vehicle Dock

ANTENNA MOUNTING

The SIRIUS Magnetic Mount Vehicle Antenna has a strong magnetic mount designed to hold it in place during normal driving conditions (highway/city). This also makes the antenna easy to remove for transferring it to other vehicles.

Figure 3 shows the optimal mounting location for the antenna on several types of vehicles. These mounting positions should be observed when installing the antenna:

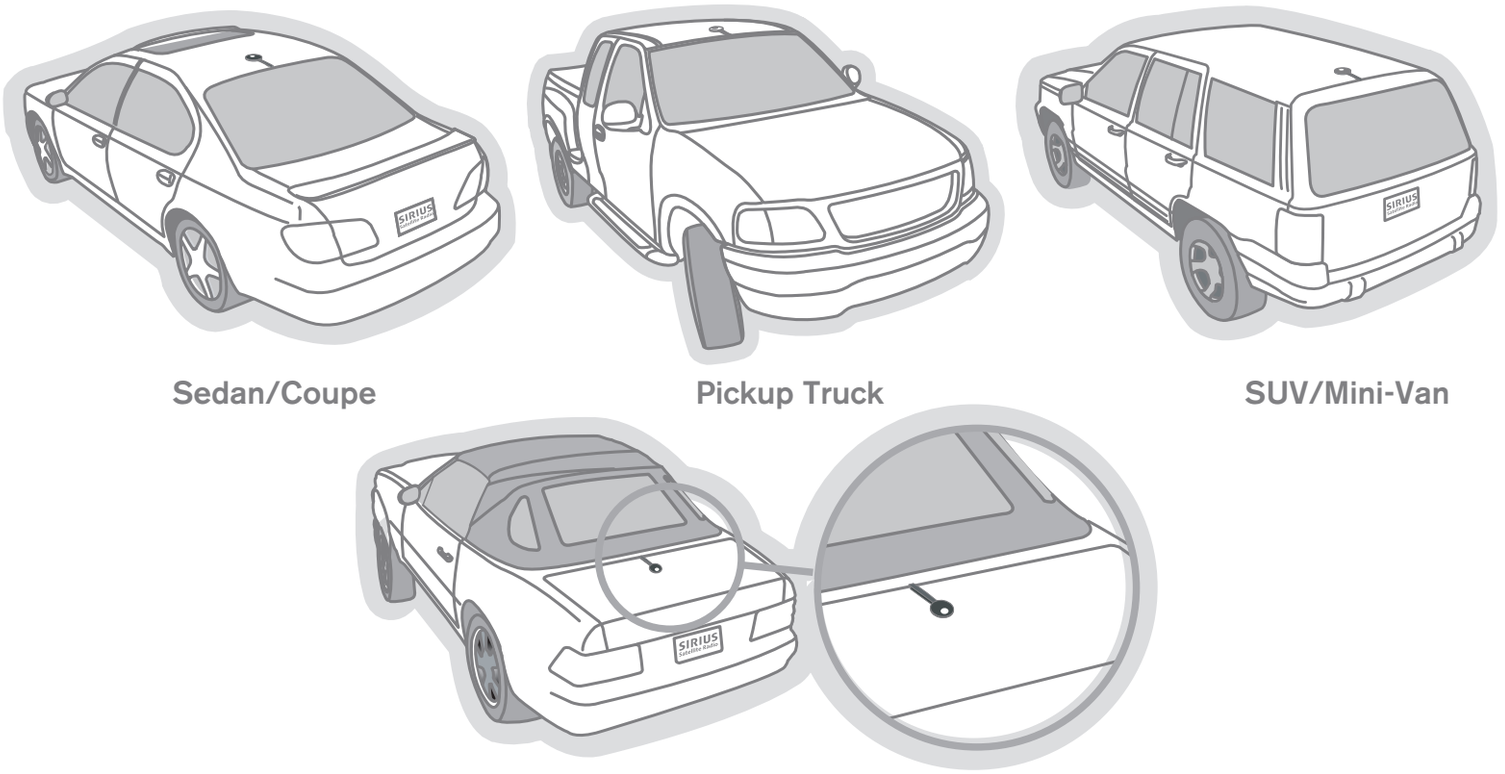


Figure 3

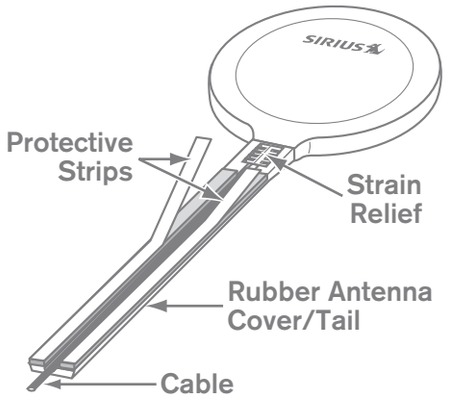
- **Sedan/Coupe/SUV/Mini-Van:** Install the antenna at the rear center of the roof, near the rear window.
- **Pickup Truck:** Install the antenna at the front center of the roof, near the windshield.
- **Convertible:** Install the antenna at the front center of the trunk lid, near the rear window.

The SIRIUS antenna needs to have an **unobstructed area of 3 inches by 3 inches around it**. It is important to mount the antenna where no obstructions will block the antenna from receiving the SIRIUS signal. Objects which can obstruct the antenna could be a roof rack, a sunroof, a roof-mounted cargo container, another antenna, etc. If your vehicle has a potential obstruction, be sure that the SIRIUS antenna is mounted at least 3 inches away from it (but no closer than 3 inches from the roof edge, or trunk lid in the case of a convertible).

Note: Read the **DO** and **DO NOT** installation tips beginning on page 28 for additional antenna installation information.

Follow this procedure to mount the antenna:

1. Select an appropriate mounting position for your type of vehicle that has an unobstructed area of 3 inches by 3 inches around the antenna.
2. Attach the Rubber Cover/Tail to the antenna, as shown in *Figure 4*, and press the antenna cable into the rubber cover/tail. The Rubber Cover/Tail will help to position the antenna the correct distance from the edge of the roof or trunk lid.



Magnetic Antenna (Upside-Down)

Figure 4

3. Clean the surface area of the vehicle where you will be installing the antenna with the alcohol prep pad.

4. Peel the protective material from the adhesive strips (see *Figure 4*, on page 18) and press the rubber Cover/Tail firmly into place on the vehicle.
5. Double check that the location of the antenna and rubber cover/tail are correct, and continue to press firmly down on the Rubber Cover/Tail for another 30 seconds. At room temperature (68° F), maximum adhesion usually occurs within 72 hours. During this period, avoid car washes and other contact with the antenna and the Rubber Antenna Cover/Tail.

CABLE ROUTING

After you have mounted the antenna you can route the antenna cable to the SIRIUS Vehicle Dock. Separate antenna cable routing procedures are provided for each type of vehicle: Sedan/Coupe, Pickup Truck, SUV/Mini-Van and Convertible.

Note that additional breakout illustrations for each step of the antenna cable routing procedures can be found on the SIRIUS website at http://www.sirius.com. Click on the **Install/Activate** link and then follow the link for the **Car Installation Tips**.

Sedan/Coupe Antenna Cable Routing Procedure

Figure 5 shows how the antenna cable should be routed from the antenna to your SIRIUS radio in a sedan/coupe.

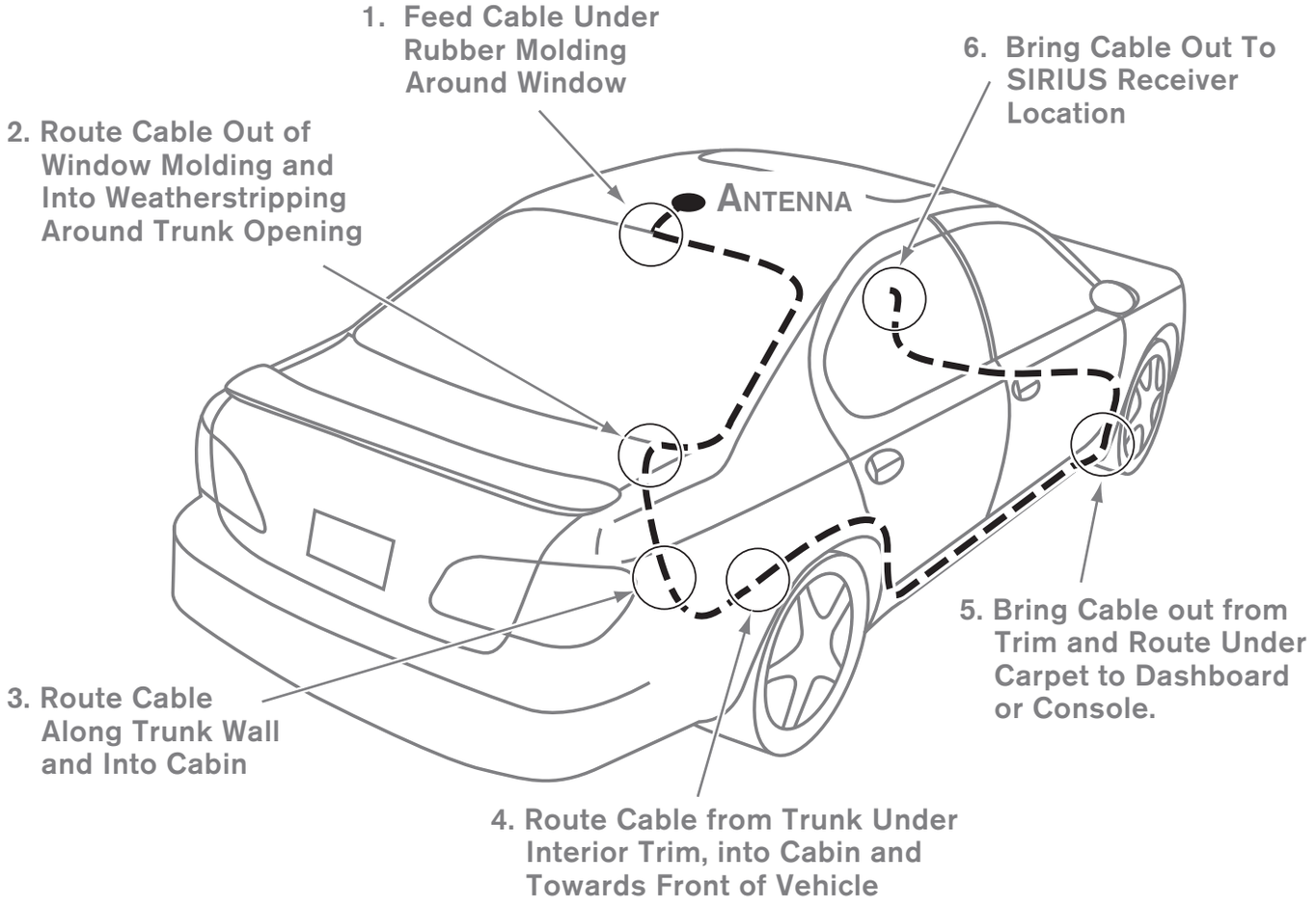

1. Feed Cable Under Rubber Molding Around Window
2. Route Cable Out of Window Molding and Into Weatherstripping Around Trunk Opening
3. Route Cable Along Trunk Wall and Into Cabin
4. Route Cable from Trunk Under Interior Trim, into Cabin and Towards Front of Vehicle
5. Bring Cable out from Trim and Route Under Carpet to Dashboard or Console.
6. Bring Cable Out To SIRIUS Receiver Location
ANTENNA

Figure 5

Follow these detailed cable installation instructions:

1. Feed the cable from the antenna underneath the rubber molding around the rear window. Use a plastic putty knife or similar object to lift the rubber molding around the rear window and tuck the antenna cable underneath the molding. Route the antenna cable around and down the window to the lowest point. If your rear window does not have rubber molding, SIRIUS recommends consulting with a professional installer.
2. Route the antenna cable out of the window molding and into the rubber weather stripping around the trunk opening. Lift the weather stripping from the opening and tuck the cable inside it, then replace the weather stripping. To avoid sharp bends in the cable, run the cable inside of the weather stripping for a few inches, then remove the cable from the weather stripping inside of the trunk. Keep the cable away from hinges, gears, etc., that could damage it.
3. Route the cable out from the rubber weather stripping and along the trunk wall. Continue routing the cable into the cabin through a conduit or along an existing wiring harness.
4. Route the cable through the main cabin area under the interior trim, towards the front of the vehicle. Use the plastic putty knife to lift the plastic trim just enough to tuck the cable under underneath. Avoid side airbag locations on back pillars and above the doors. (Airbag locations are marked with “SRS” logos.) Be careful not to crimp or cut the cable.
5. Bring the cable out from the trim near the firewall and route it under the carpet toward the dashboard or console. Coil any excess cable in a hidden location, such as under the carpet, keeping it away from any vehicle pedals or controls. Secure the excess cable with wire ties.
6. Bring the end of the cable out at the SIRIUS Vehicle Dock location. Leave yourself enough cable so you can easily connect it to the antenna connector on the Vehicle Dock.

Pickup Truck Antenna Cable Routing Procedure

Figure 6 shows how the antenna cable should be routed from the antenna to your SIRIUS radio in a pickup truck.

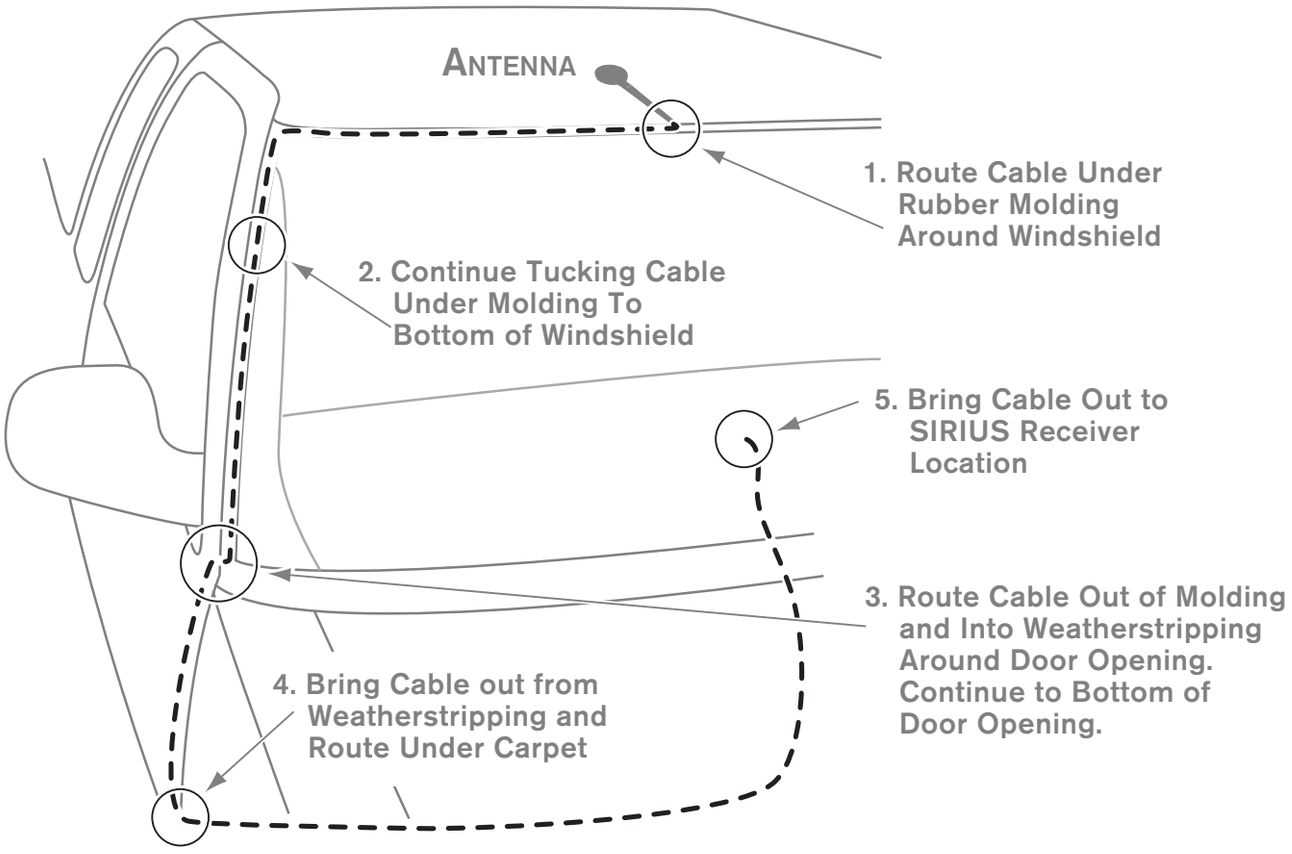

ANTENNA
1. Route Cable Under Rubber Molding Around Windshield
2. Continue Tucking Cable Under Molding To Bottom of Windshield
5. Bring Cable Out to SIRIUS Receiver Location
3. Route Cable Out of Molding and Into Weatherstripping Around Door Opening. Continue to Bottom of Door Opening.
4. Bring Cable out from Weatherstripping and Route Under Carpet

Figure 6

Follow these detailed cable installation instructions:

1. Use a plastic putty knife or similar tool to lift the rubber molding around the windshield and tuck the antenna cable underneath it.
2. Continue tucking the cable underneath the windshield molding around the windshield to the lowest corner.
3. At the lowest corner of the windshield, route the cable out of the windshield molding and into the rubber weather stripping around the door opening. Lift the weather stripping from the opening and tuck the cable inside it, then replace the weather stripping. Run the cable inside of the weather stripping to the bottom of the door opening.
4. Pull the cable out of the weather stripping at the bottom of the door opening and route it under the carpet toward the dashboard. Coil any excess cable in a hidden location, such as under the carpet, keeping it away from any vehicle pedals or controls. Secure the excess cable with wire ties.
5. Bring the end of the cable out at the SIRIUS Vehicle Dock location. Leave yourself enough cable so you can easily connect it to the antenna connector on the Vehicle Dock.

SUV/Mini-Van Antenna Cable Routing Procedure

Figure 7 shows how the antenna cable should be routed from the antenna to your SIRIUS radio in an SUV or a Mini-Van.

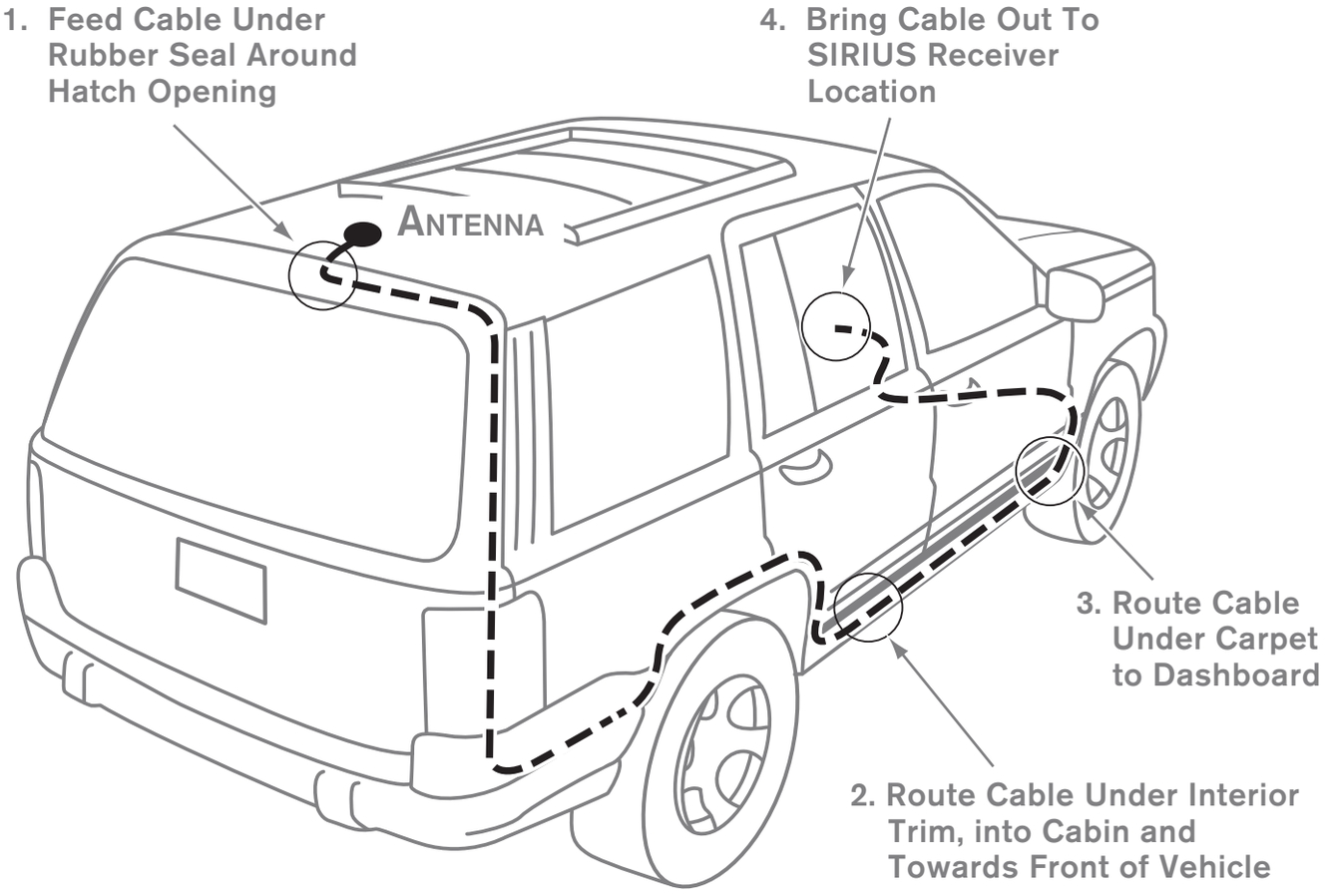

1. Feed Cable Under Rubber Seal Around Hatch Opening
4. Bring Cable Out To SIRIUS Receiver Location
ANTENNA
3. Route Cable Under Carpet to Dashboard
2. Route Cable Under Interior Trim, into Cabin and Towards Front of Vehicle

Figure 7

Follow these detailed cable installation instructions:

1. Feed the antenna cable underneath the rubber weather stripping of the rear tailgate window/door and route the cable along the rear hatch. Lift the weather stripping from the opening and tuck the cable inside it, then replace the weather stripping. Pull the cable out from weather stripping and route it into the cabin under the interior trim. Avoid hinges or gears that could crimp or cut the cable.
2. Route the cable through the SUV's main cabin area under the interior trim, towards the front of the vehicle. Use a plastic putty knife to lift the plastic trim just enough to tuck the cable under underneath. Avoid side airbag locations on back pillars and above the doors. (Airbag locations are marked with "SRS" logos.) Be careful not to crimp or cut the cable.
3. Bring the cable out from the trim near the firewall and route it under the carpet toward the dashboard or console. Coil any excess cable in a hidden location, such as under the carpet, keeping it away from any vehicle pedals or controls. Secure the excess cable with wire ties.
4. Bring the end of the cable out at the SIRIUS Vehicle Dock location. Leave yourself enough cable so you can easily connect it to the antenna connector on the Vehicle Dock.

Convertible Antenna Cable Routing Procedure

Figure 8 shows how the antenna cable should be routed from the antenna to your SIRIUS radio in a convertible.

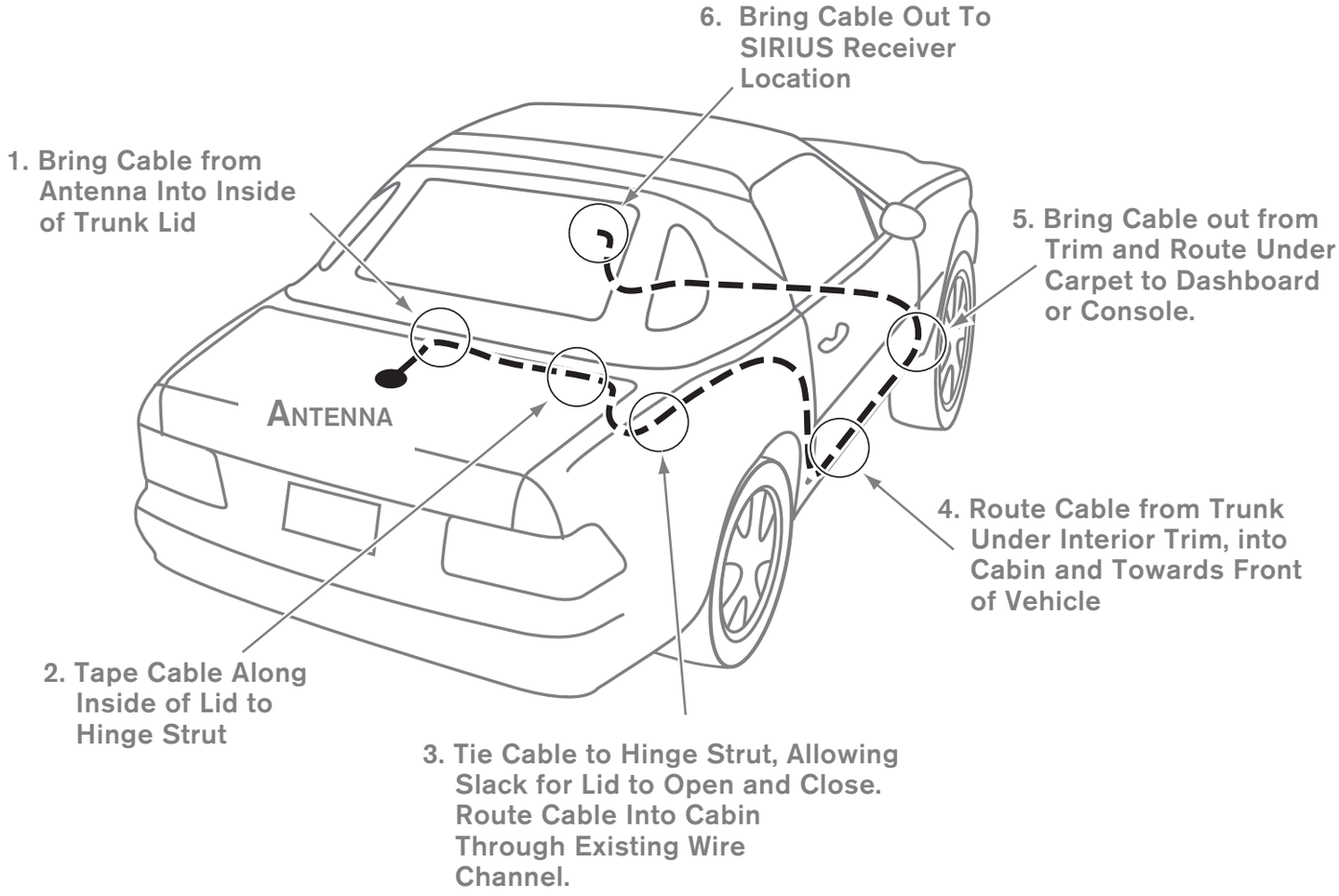

6. Bring Cable Out To SIRIUS Receiver Location
1. Bring Cable from Antenna Into Inside of Trunk Lid
5. Bring Cable out from Trim and Route Under Carpet to Dashboard or Console.
ANTENNA
4. Route Cable from Trunk Under Interior Trim, into Cabin and Towards Front of Vehicle
2. Tape Cable Along Inside of Lid to Hinge Strut
3. Tie Cable to Hinge Strut, Allowing Slack for Lid to Open and Close. Route Cable Into Cabin Through Existing Wire Channel.

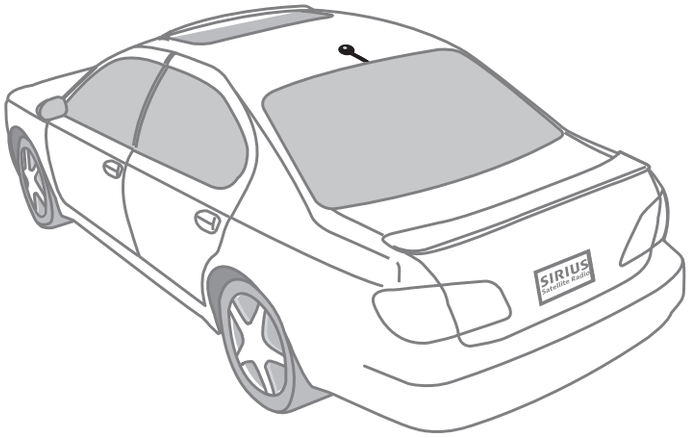
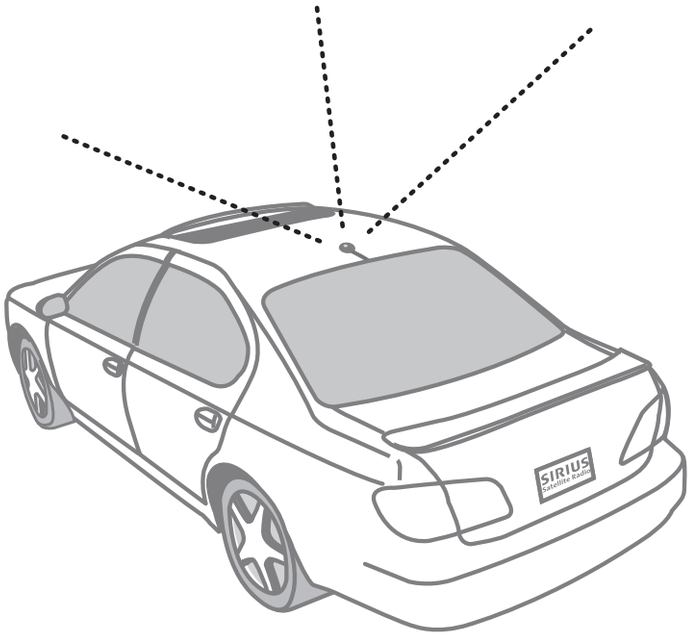
Figure 8

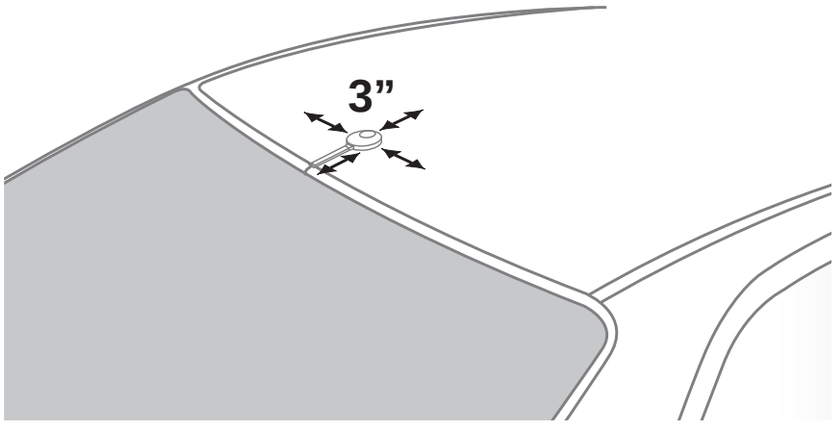
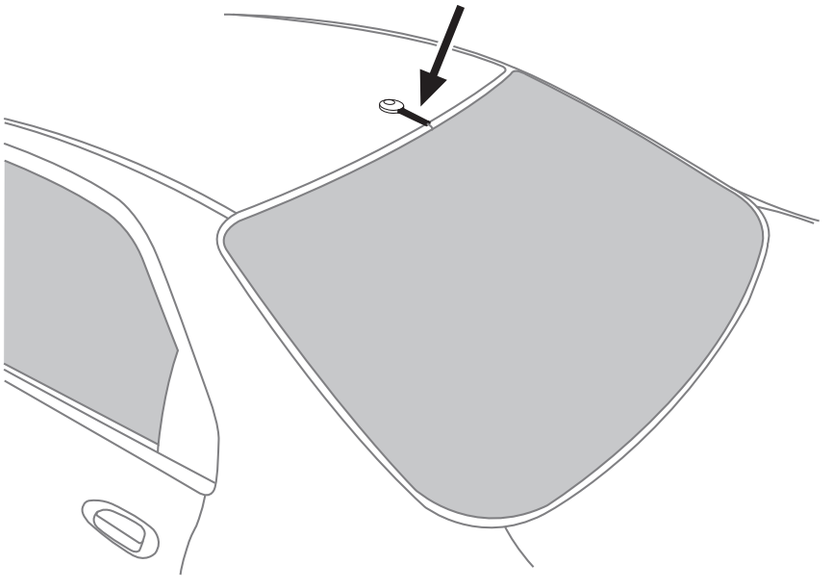
Follow these detailed cable installation instructions:

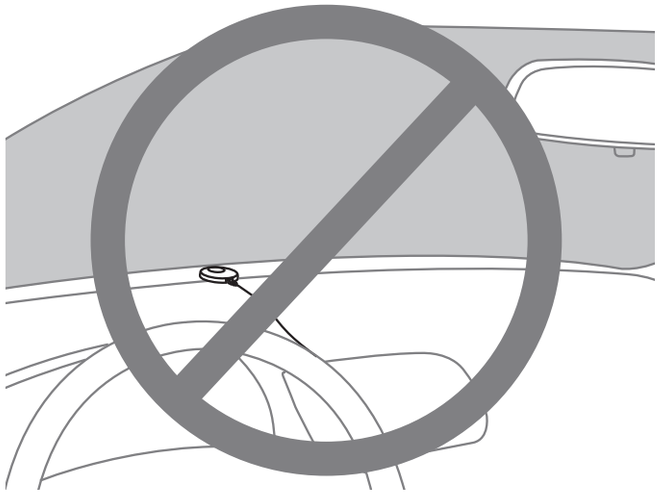
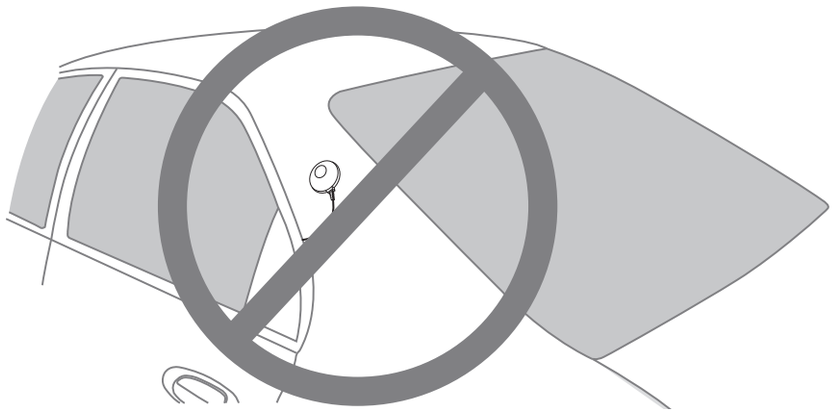
1. Bring the cable from the antenna into the trunk at the front edge of the trunk lid. Keep any bends in the cable loose. Tape or tie the cable along the inside of the trunk lid to the trunk lid hinge strut.
2. Allow enough slack in the cable so the trunk lid can easily open and close and keep the cable away from hinges, gears, etc., that could crimp or cut it. Route the cable along the trunk wall and into the cabin through a conduit or along an existing wiring harness.
3. Route the cable through the main cabin area under the interior trim, towards the front of the vehicle. Use a plastic putty knife to lift the plastic trim just enough to tuck the cable under underneath. Avoid side airbag locations on back pillars and above the doors. (Airbag locations are marked with “SRS” logos.) Be careful not to crimp or cut the cable.
4. Bring the cable out from the trim near the firewall and route it under the carpet toward the dashboard or console. Coil any excess cable in a hidden location, such as under the carpet, keeping it away from any vehicle pedals or controls. Secure the excess cable with wire ties.
5. Bring the end of the cable out at the SIRIUS Vehicle Dock location. Leave yourself enough cable so you can easily connect it to the antenna connector on the Vehicle Dock.

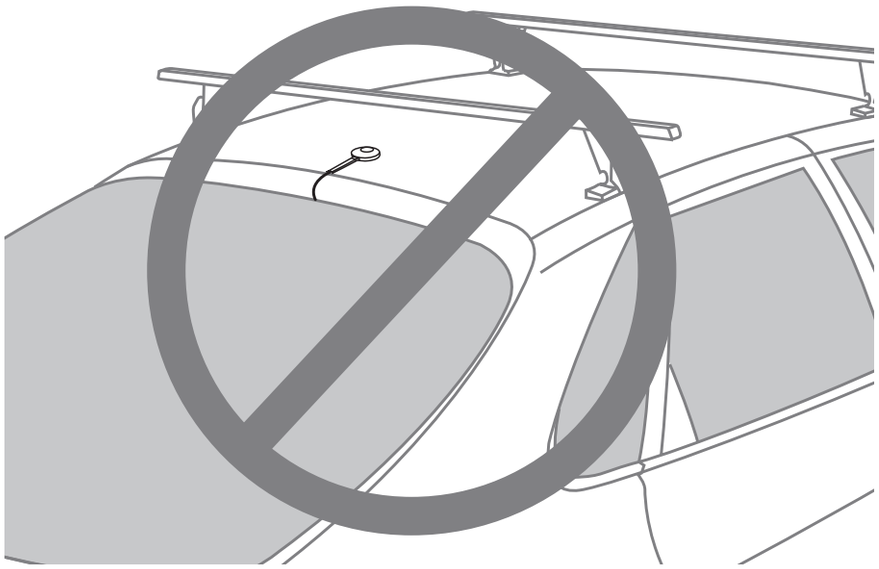
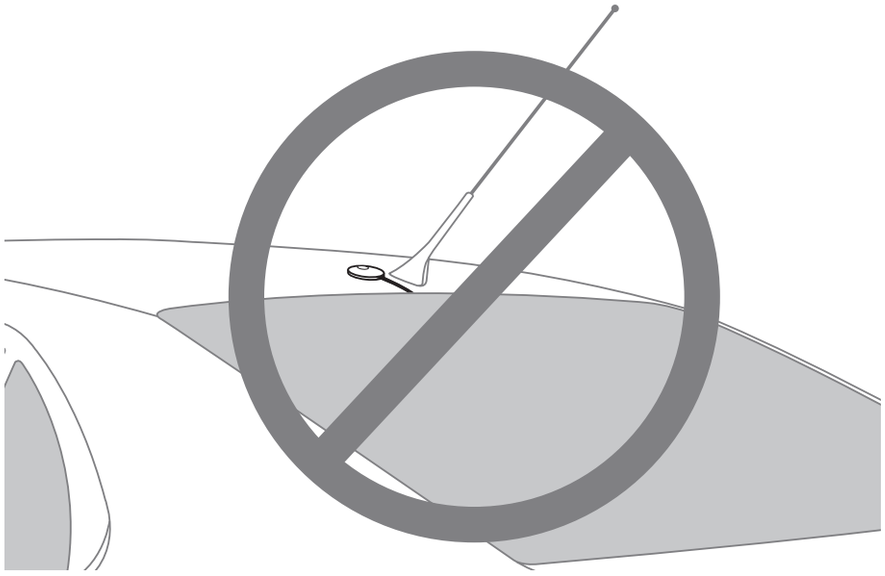
TIPS

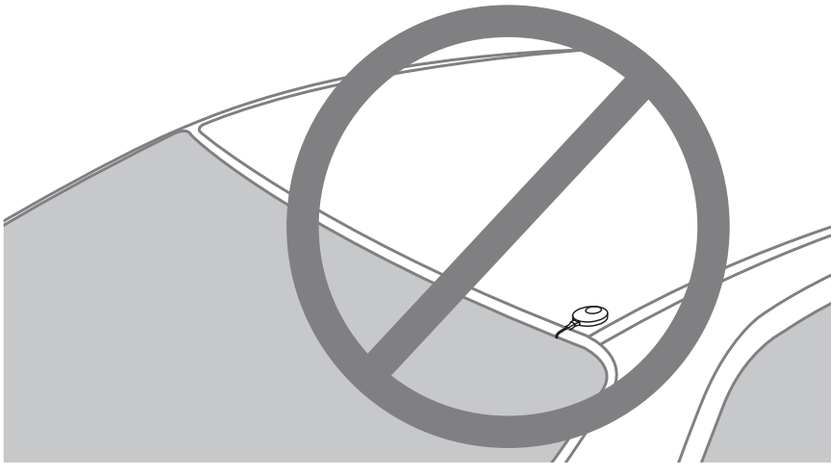
The following **DO** and **DO NOT** antenna mounting tips illustrate how to install the antenna for optimal performance, and also illustrate where the antenna should not be installed.

DO	Mount the antenna on the roof, at least 3 inches from the edge.	
DO	Mount the antenna on the roof where it has a clear view of the sky in all directions.	

DO	Mount the antenna on the roof where it has at least 3 inches of clear space around it.	
DO	Use the supplied Rubber Tail Cover to protect the antenna cable.	

DO NOT	Don't mount the antenna inside the vehicle, for example, on the dashboard.	
DO NOT	Don't mount the antenna on any of the vehicle's front, back or side pillars.	

DO NOT	Don't mount the antenna close to a roof rack. Adjust the rack so it's further away from the antenna or move the antenna closer to the center of the roof.	
DO NOT	Don't mount the antenna close to another antenna. Mount it at least 3 inches away.	

DO NOT	Don't mount the antenna closer than 3 inches from the edge of the roof. Use the supplied rubber tail/ cover as a guide for judging proper length and correct positioning.	

Docking Your SIRIUS InV2

To place your SIRIUS radio into the Dash Mount, gently slide the U-shaped fitting on the back of the InV2 unit into the Dash Mount until it snaps into place (see *Figure 9*).

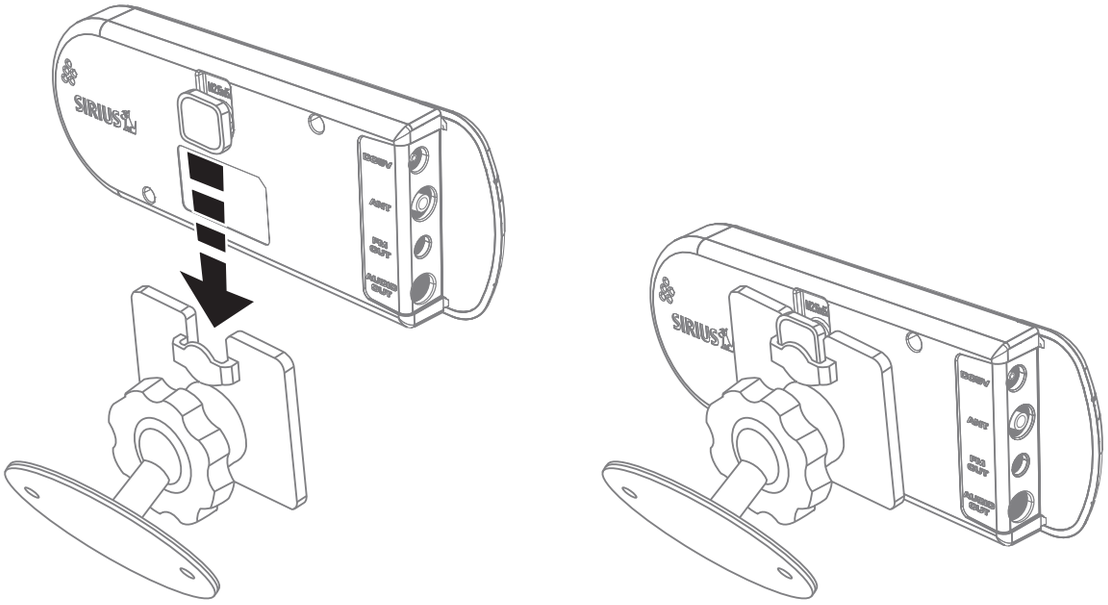


Figure 9

Connecting the Antenna

After you've routed the antenna cable to the Dash Mount and docked the InV2, connect the antenna cable to the ANT connection on the unit's left side (see *Figure 10*.)

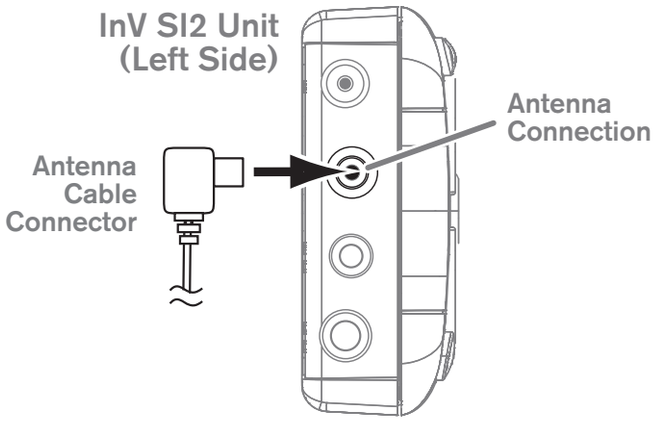


Figure 10

Connecting the Cigarette Lighter Adapter

Connect the provided cigarette lighter adapter to the 5VDC connector on the left side of the InV2 unit. (See *Figure 11*.)

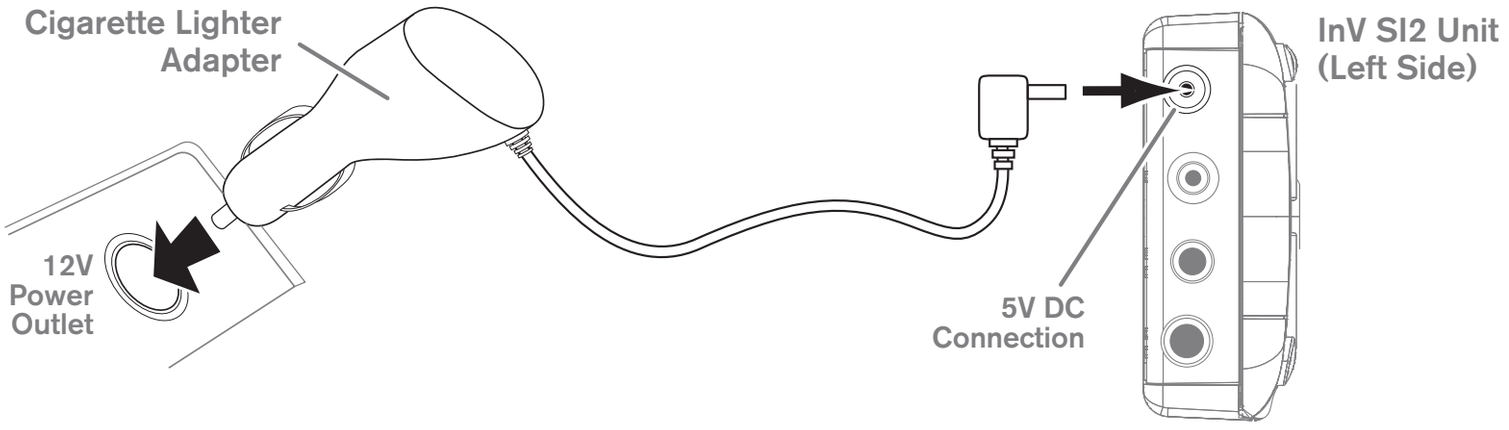


Figure 11

Note: Do not power the InV2 directly from your vehicle's 12VDC power system without using the Cigarette Lighter Adapter. This could damage your SIRIUS radio.

Cable Separation and Routing

FCC Information

The satellite antenna cable, FM extender antenna (FEA) cable and cigarette lighter adapter (CLA) power cable must be appropriately separated and routed for your radio to be compliant with federal regulations.

Step 1

The connections on your radio are clearly marked. Install your radio and connect the antenna cable into the connection labeled “ANT”, the CLA power cable into the power connection marked “PWR” (or 5VDC) and the FEA cable into the connection marked “FM OUT”. (See *Figure 12*.)

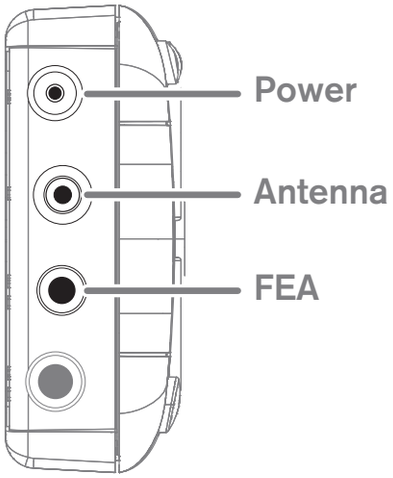


Figure 12

Step 2

It is important that you keep the three cables as separate from each other as possible and that you keep the two antenna cables away from the radio and from the CLA power cable. The cables must not be bundled together as they exit the radio (see *Figure 13*, on page 35).

As a guide, you can follow the diagram in *Figure 13*, adapting the example to suit your own vehicle’s configuration. For example, if you cigarette lighter socket is to the left of theradio, route the two antenna cables towards the passenger side of the vehicle. If your cigarette lighter socket is on the right-hand side of the radio, route the two antenna cables towards the driver’s door. The CLA cable and antenna cables MUST be routed in opposite directions. Safely conceal all antenna cables within door, carpet or cash panels to prevent snags and interference.

Step 3

Coil any excess cable between the cigarette lighter socket and radio, keeping it away from vehicle pedals or controls to prevent any slack which might interfere with the safe operation of your vehicle. Secure the excess cable with wire ties. If possible, tuck the coiled part in a hidden location, such as in between the carpet and plastic panel of the front console (see *Figure 14*).

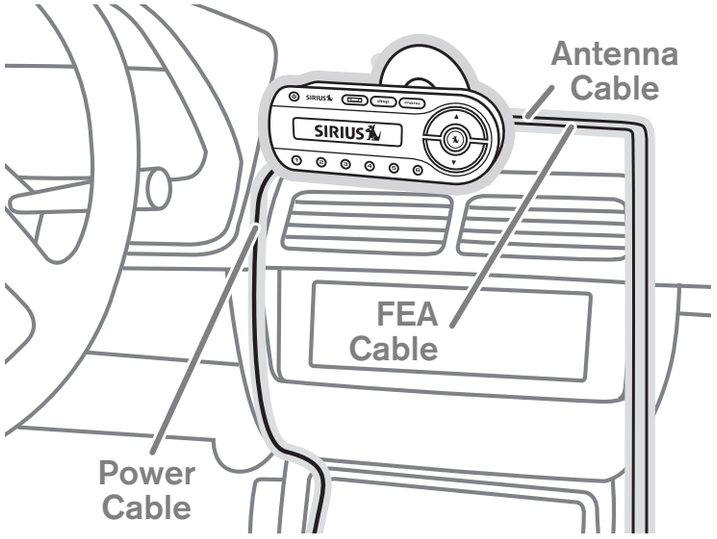


Figure 13

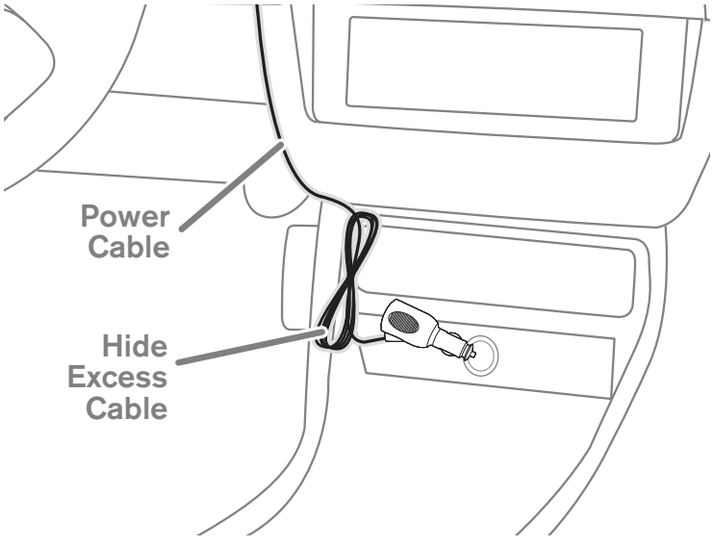


Figure 14

Step 4

Follow the instructions in this manual to install, route and hide the antenna cable and the FEA cable. Be sure to coil and secure any excess cable in a hidden location, such as under the carpet on the passenger side, keeping it away from vehicle pedals and controls. The bundled cables should be as far away from the CLA power cable as possible (see *Figure 15*).

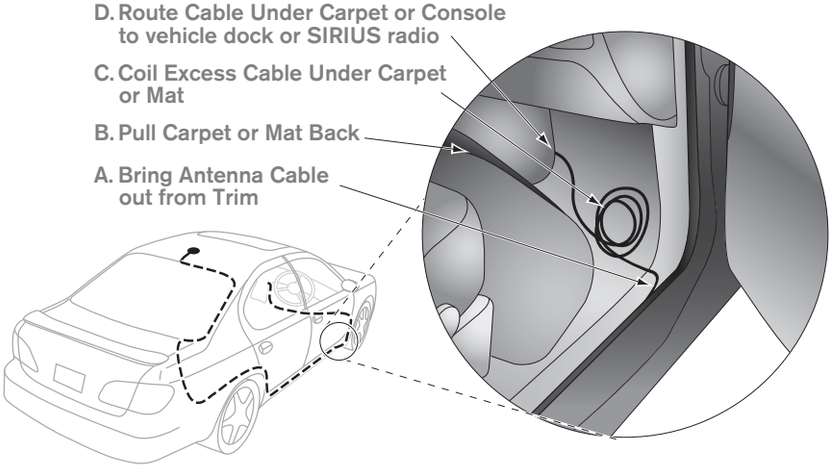

D. Route Cable Under Carpet or Console to vehicle dock or SIRIUS radio
C. Coil Excess Cable Under Carpet or Mat
B. Pull Carpet or Mat Back
A. Bring Antenna Cable out from Trim

Figure 15

Connecting Your SIRIUS InV2 to Your Vehicle's Audio System

There are two ways to connect your SIRIUS InV2 to your vehicle's audio system: Direct Connection or Wireless Connection. Which one will perform best in your vehicle depends on your vehicle's audio system.

For the latest information go to **http://www.sirius.com/vehicleinstallation**.

Direct Wired Audio Connection

If your vehicle's audio system has an "AUX IN" or "LINE IN" jack it is the best-quality audio connection you can use for your SIRIUS radio. (And if the AUX IN or LINE IN connector is located somewhere on the front of your vehicle radio or elsewhere in the cabin, this is also the easiest way to connect your SIRIUS receiver.)

1. Purchase an audio cable that matches the connection type of your vehicle's audio system and your SIRIUS InV2 unit at your local electronics retailer.
   - The InV2 unit requires a male ⅛" stereo connector.
2. Plug the cable's male ⅛" stereo connector into the AUDIO jack on the left side of the InV2 unit. Plug the other end into the AUX IN/LINE IN connector on your vehicle's audio system. (See *Figure 16*.)

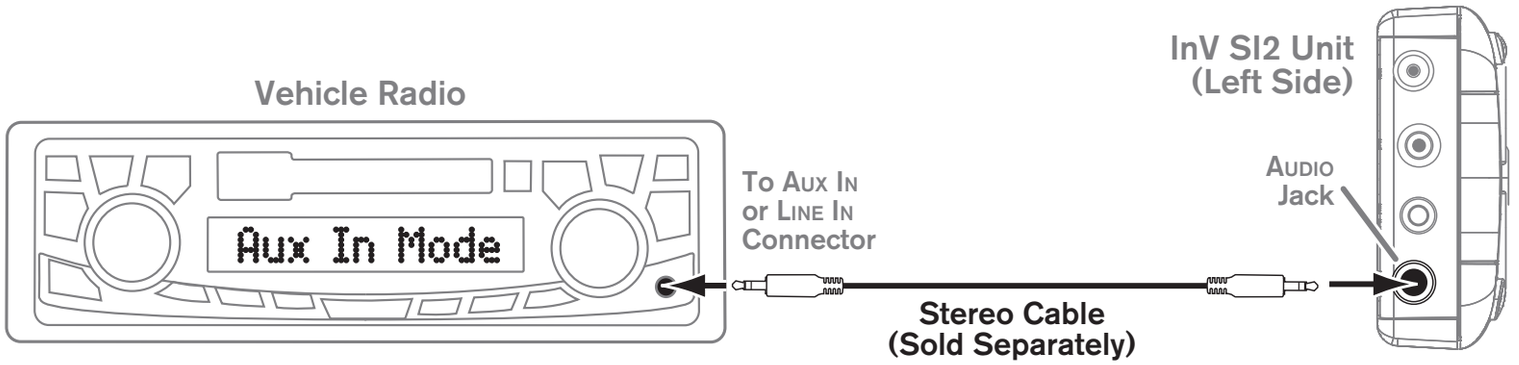


Figure 16

Direct FM Audio Connection

If your vehicle's audio system does not have an Aux In/Line In connection, a SIRIUS FM Direct Adapter (sold separately) will provide the next best quality connection between your SIRIUS InV2 and your vehicle radio. You will listen to your SIRIUS radio through your car radio's FM tuner, but the SIRIUS FM Direct Adapter connects your vehicle's FM radio directly to your SIRIUS radio's FM Out jack, eliminating the outside static and interference you sometimes experience when using a wireless FM connection. (See *Figure 17*.)

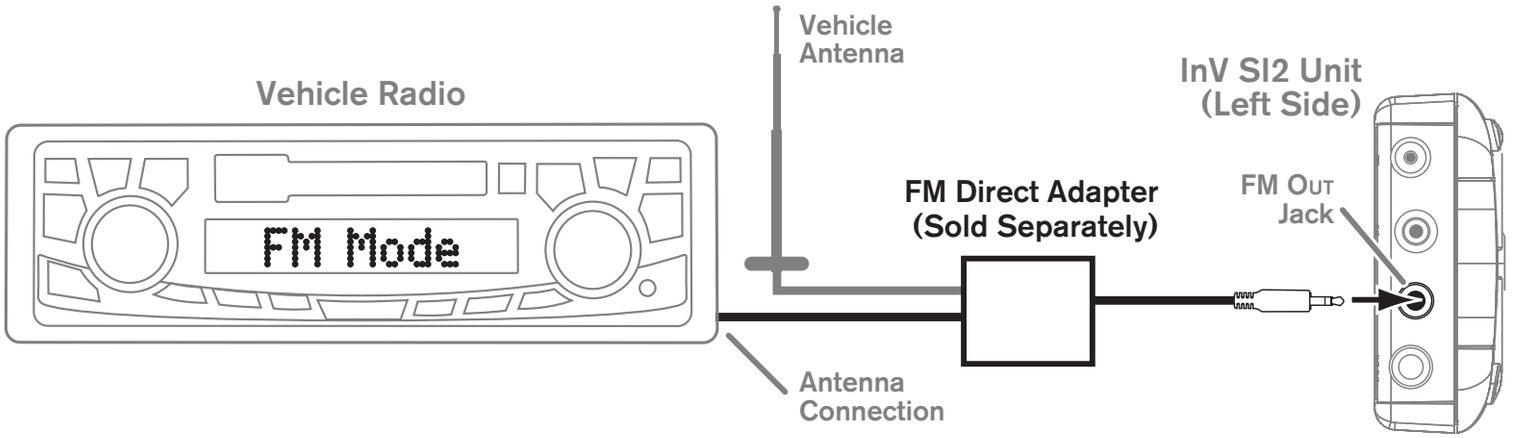


Figure 17

NOTE: Professional installation may be required. See your local SIRIUS retailer. The SIRIUS FM Direct Adapter is available at your local SIRIUS retailer or at http://shop.sirius.com. Follow to the instructions included with the FM Direct Adapter.

Cassette Adapter

If your vehicle's audio system has a cassette player you can purchase a cassette adapter from your local electronics retailer or from SIRIUS at http://shop.sirius.com. Plug the adapter's connector into the AUDIO jack on the left side of the InV2 unit, and insert the adapter into your vehicle's cassette player. (See *Figure 18*.)

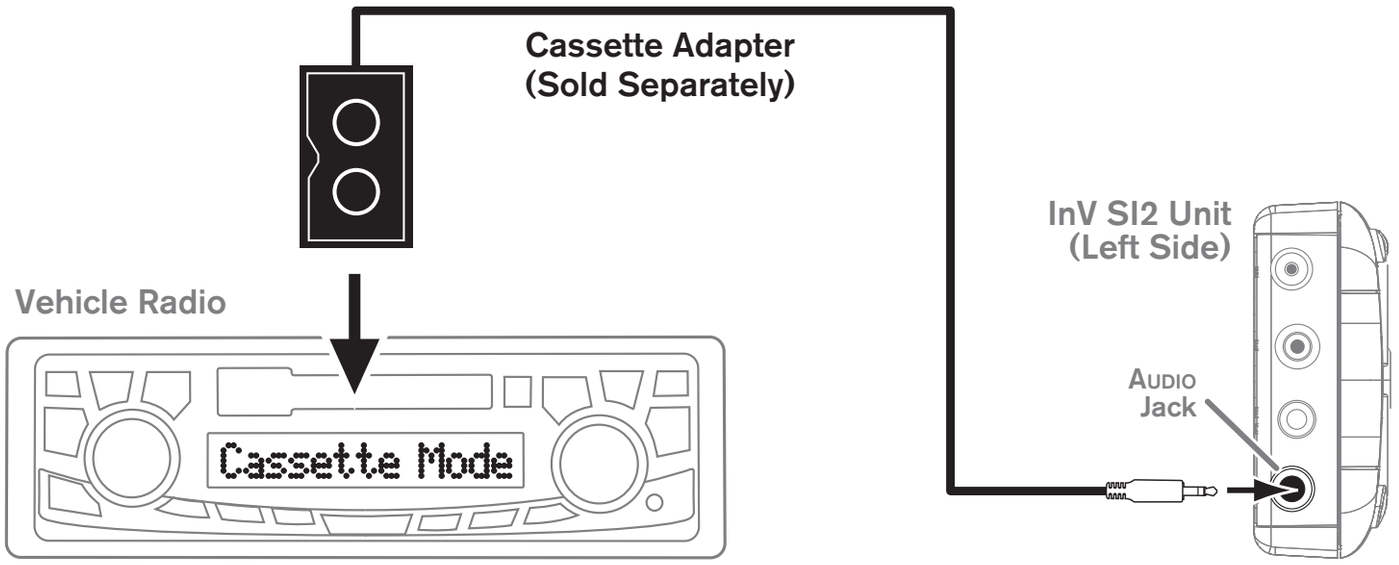


Figure 18

Note: Refer to the cassette adapter's instructions for correct use.

Wireless Audio Connection

If you cannot connect your SIRIUS InV2 directly to your vehicle's audio system, it contains an FM transmitter that will 'broadcast' its audio to your vehicle's FM radio.

To use this you need to tune the InV2's FM transmitter to an FM frequency that's not being used in your area (see *Figure 19).* If you use an FM channel that is being used by a local broadcaster, it will interfere with the performance of your SIRIUS radio.

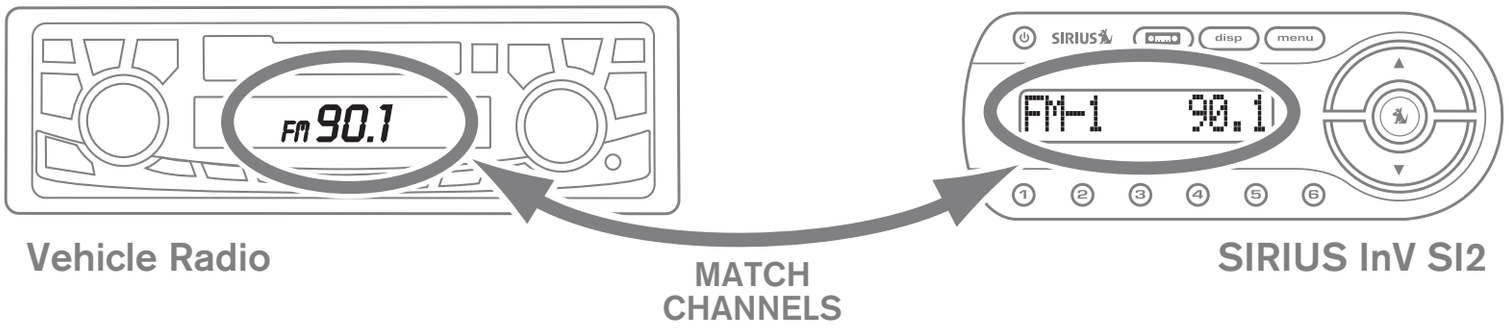


Figure 19

1. Use your vehicle radio's *Tune* function (not the *Scan* function) to tune through its FM channels to find an FM channel (between 88.1MHz and 107.9MHz) that is not broadcasting in your area.
   - If you're not sure which FM channels are not broadcasting in your home or travel cities, you can also go to **http://www.sirius.com/fmchannel** and search for a suggested FM channel based on your zip code.
2. Once you have located an FM channel that is not broadcasting in your area, save it as a preset on your vehicle radio. This will become your SIRIUS preset.
3. Dock your SIRIUS receiver and turn its power ON. Wait for the *Channel Update* to finish before pressing any buttons.

4. Press and hold the FM PRESETS button. The InV2's display will show the FM1 preset frequency (see *Figure 20*).

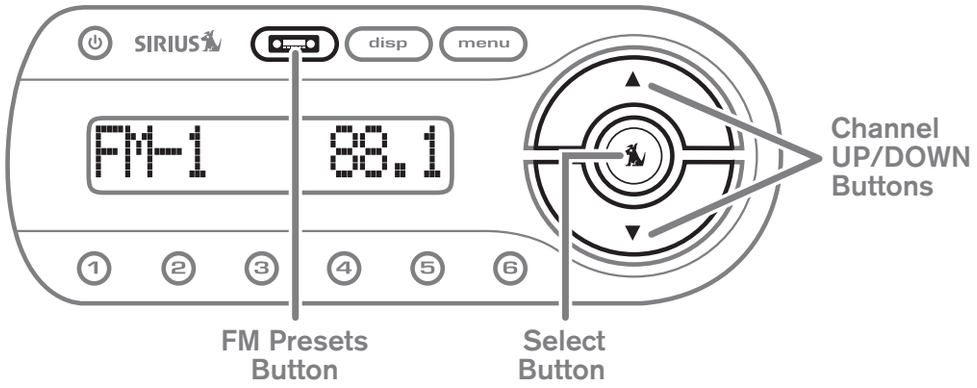


Figure 20

Note: FM1 is factory-set to 88.1MHz. This may not be the best frequency for your area.

5. Press the Select button to select the FM1 preset.
6. Use the Channel UP/DOWN buttons to browse-through the different FM channels until the channel you saved as a preset in *Step 2* on page 39 appears (see *Figure 21*).

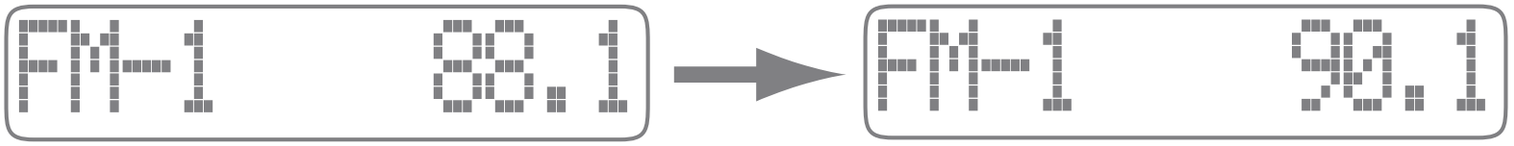


Figure 21

7. Press the Select button. The new channel will now be the FM1 preset.

To listen to your SIRIUS radio, turn your SIRIUS radio ON, then turn your vehicle's FM radio ON and press the SIRIUS preset you set in *Step 2,* on page 39. You should hear your SIRIUS radio through your vehicle's FM radio.

TIP: If you regularly travel between cities with different active FM channels, you may need to find channels that are not broadcasting in each city. Your SIRIUS InV2 can store 5 different preset FM transmitter channels so you can easily switch to the best FM channel for each city.

Wireless Audio Connection Using the FM Extender Antenna

Your SIRIUS radio includes an FM Extender Antenna (FEA) that can maximize the audio quality of your SIRIUS radio when using a Wireless Connection. The FM Extender Antenna brings the FM signal transmitted from your SIRIUS radio into close proximity with your vehicle's FM antenna to provide a strong FM signal for good reception (see *Figure 22*).

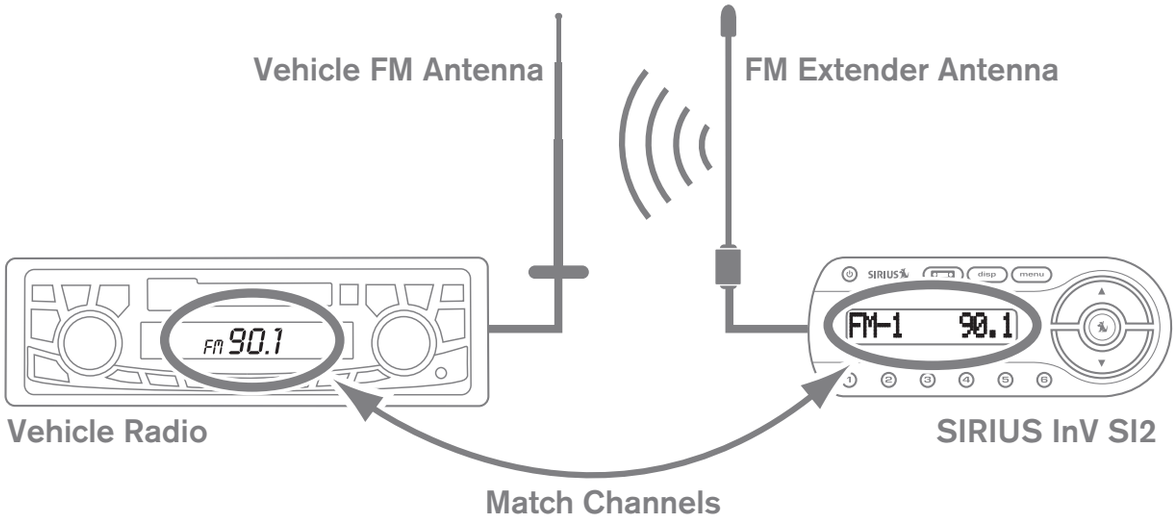


Figure 22

Because of the different kinds and locations of radio antennas found in different vehicles, SIRIUS suggests that the FM Extender Antenna be professionally installed in your vehicle. Professional installation provides an experienced technician to install the Extender Antenna, knowledge of your vehicle for locating its radio antenna, and routing the cable and connecting it to your SIRIUS radio. Ask your SIRIUS retailer if they provide professional installation services, or can recommend a professional installation service.

IMPORTANT NOTE

The FM Extender Antenna is placed **inside** your vehicle in close proximity to the vehicle's FM antenna. In order for it to provide a strong FM signal for good reception, it **MUST** be mounted in the correct location and orientation, as described in the following section. The correct mounting location and orientation is determined by the type and location of the vehicle's FM antenna.

WARNING AND SAFETY INFORMATION

Safety Precautions

Be sure to observe the following warnings. Failure to follow these safety instructions and warnings may result in a serious accident and/or personal injury.

- Installation must be performed according to this installation guide. SIRIUS is not responsible for issues arising from installations not performed according to the procedures in this guide.
- Do not install the FM Extender Antenna where it will hinder or block your view. In some states it may be illegal to mount it on the windshield of your vehicle. Check applicable law for any restrictions or limitations before installing the extender cable on your windshield.
- Do not install the FM Extender Antenna where it may hinder the function of safety devices such as an airbag. Doing so may prevent the airbag from functioning properly in the event of an accident.
- The installation and use suggestions contained in this manual are subject to any restrictions or limitations that may be imposed by applicable law. The purchaser should check applicable law for any restrictions or limitations before installing the extender cable.

WARNING

Notice To Drivers In California and Minnesota

State law prohibits drivers in California and Minnesota from using suction mounts on their windshields while operating motor vehicles. Other dashboard or friction mounting options should be used. SIRIUS does not take any responsibility for any fines, penalties, or damages that may be incurred as a result of disregarding this notice. (See California Vehicle Code Section 26708(a); Minnesota Statutes 2005, Section 169.71)

A NOTE ABOUT THE INSTALLATION PROCEDURE

Before you permanently mount the FM Extender Antenna (FEA), you will first mount it using the included suction cup mounts to test the installation. Once you find an acceptable location, you will remove the suction cups and permanently adhere the FEA using its adhesive mounts.

INSTALLATION

Step 1: Determine the type and location of your vehicle's FM antenna

The key to properly installing the FEA in your vehicle is being able to determine the type and location of your vehicle's FM antenna. The type and location of the FM antenna in your vehicle should be one of the following (see *Figure 23*, opposite):

A. Whip/aerial mounted on the front fender or hood: A fixed or retractable aerial antenna located on the front fender or hood of the vehicle.

B. Whip/aerial mounted in the A-pillar of car frame: A fixed or retractable aerial antenna located in the A-pillar of the vehicle's frame.

C. In-glass, in the rear windshield: Several lengths of wire in the rear windshield glass, usually near the top of the window. There is a difference between the FM antenna and the rear window defroster wires found in many vehicles. The FM antenna wires have uneven spacing, breaks in the wires, and some of the wires do not run from edge-to-edge in the glass, while the rear window defroster wires have uniform spacing and all wires run from edge-to-edge in the glass.

D. Whip/aerial mounted on rear part of roof: A whip or aerial antenna mounted on the rear part of the roof (often just above the rear windshield glass). The whip or aerial should be 7 inches or longer.

E. Whip/aerial mounted on the rear fender or trunk: A fixed or retractable whip or aerial antenna located on the rear fender or trunk of the vehicle.

F. Whip/aerial mounted on front part of roof: A whip or aerial antenna mounted on the front part of the roof (often just above the front windshield glass). The whip or aerial should be 7 inches or longer.

G. In-glass, in the front windshield: One or more strands of wire in the front windshield, usually near the top of the windshield.

H. In-glass, in a rear side window: Several strands of wires in a rear side window, often found in SUVs, mini-vans and station wagons.

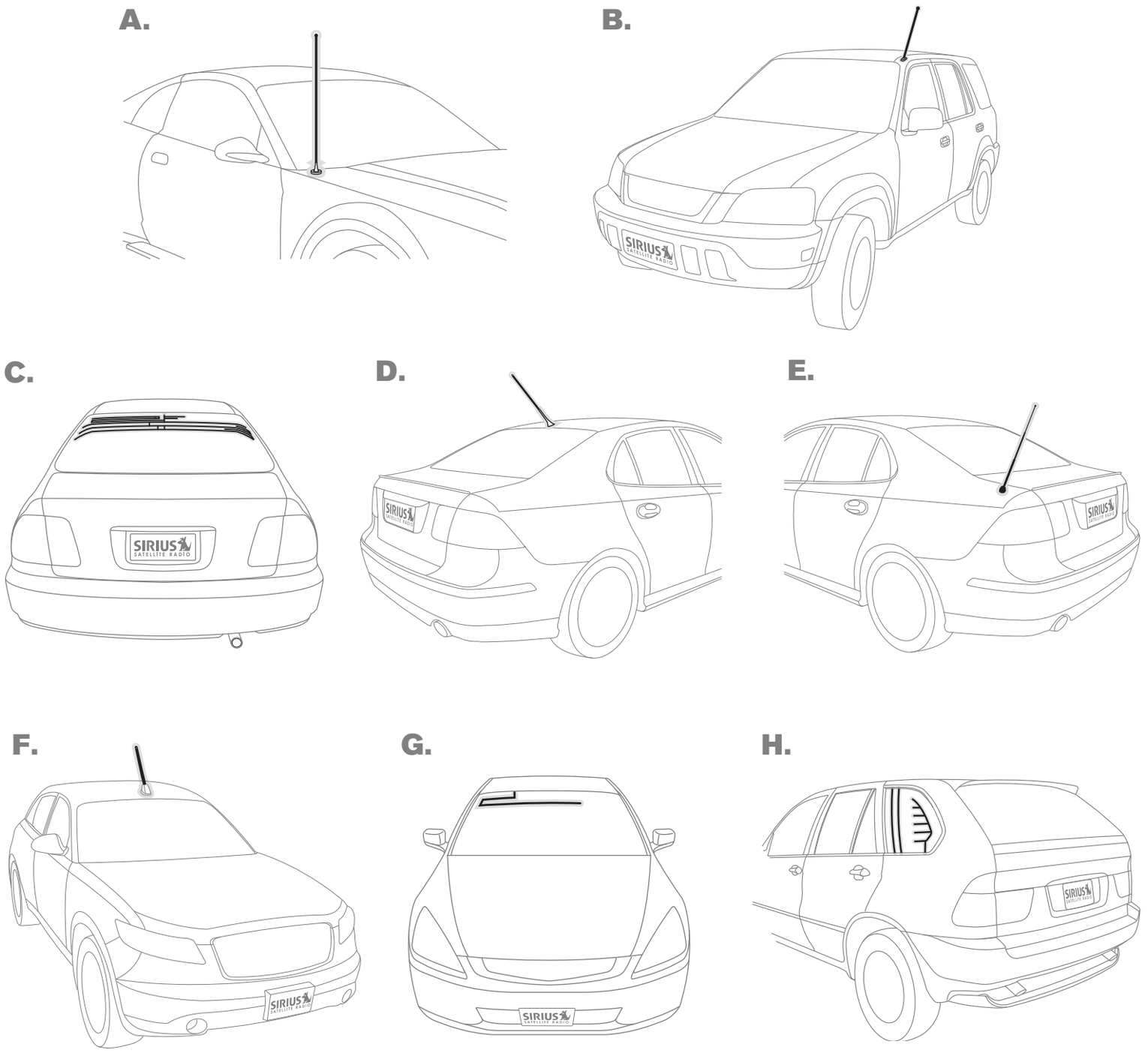


Figure 23

Step 2: Prepare the FEA for temporary installation

Attach the suction cups to the antenna portion of the FEA in the positions shown in *Figure 24*. The antenna portion of the FEA is the relatively thinner section of the cable in between the bead and the arrow that transmits the FM signal to your vehicle's FM antenna.

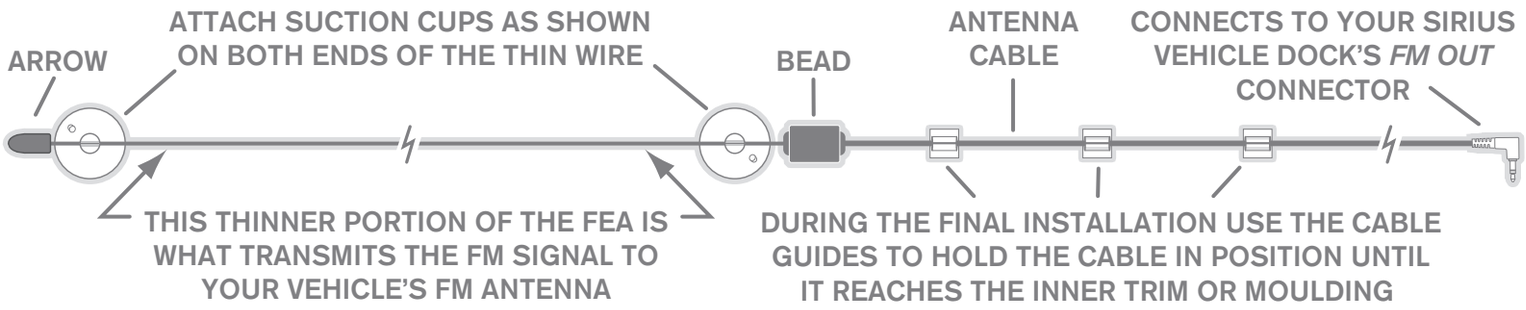

ARROW
ATTACH SUCTION CUPS AS SHOWN ON BOTH ENDS OF THE THIN WIRE
BEAD
ANTENNA CABLE
CONNECTS TO YOUR SIRIUS VEHICLE DOCK'S *FM OUT* CONNECTOR
THIS THINNER PORTION OF THE FEA IS WHAT TRANSMITS THE FM SIGNAL TO YOUR VEHICLE'S FM ANTENNA
DURING THE FINAL INSTALLATION USE THE CABLE GUIDES TO HOLD THE CABLE IN POSITION UNTIL IT REACHES THE INNER TRIM OR MOULDING

Figure 24

Step 3: Use the suction cups to temporarily install the FEA according to your vehicle's antenna type

On the next several pages you will find the FEA mounting location for your type of FM antenna (**A**, **B**, **C**, etc.). Before attaching the FEA, clean the area where the suction cups will be mounted with the supplied alcohol swab. The FEA wire between the two suction cups should be pulled taut and as straight as possible, and should not obstruct the driver's view.

For vehicles with A and B type FM antennas:

- Whip/aerial mounted on the front fender or hood
- Whip/aerial mounted in the A-pillar of car frame

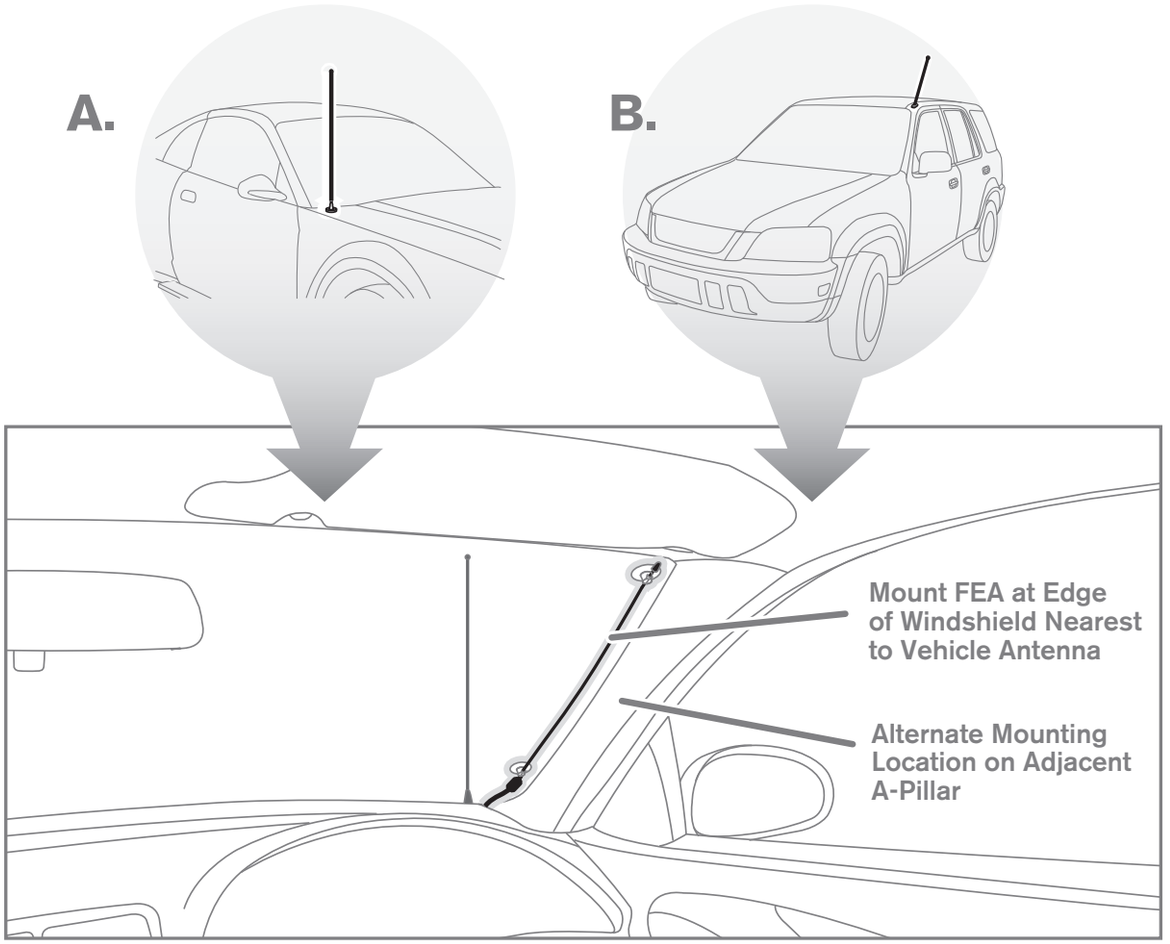


Figure 25

Mount the FEA vertically on the front windshield at the edge of the glass, on the same side as the vehicle's antenna (i.e. nearest to the antenna). See *Figure 25*. Clean the suction cup mounting areas with the alcohol swab. The FEA wire between the two suction cups should be pulled taut, and as straight as possible, and should not obstruct the driver's view.

Caution: In some states it may not be legal to put the FEA on the windshield glass. In this case, the FEA should be mounted on the A-Pillar adjacent to the vehicle's FM antenna.

For vehicles with C and D type FM antennas:

- In-glass, in the rear windshield
- Whip/aerial mounted on rear part of roof

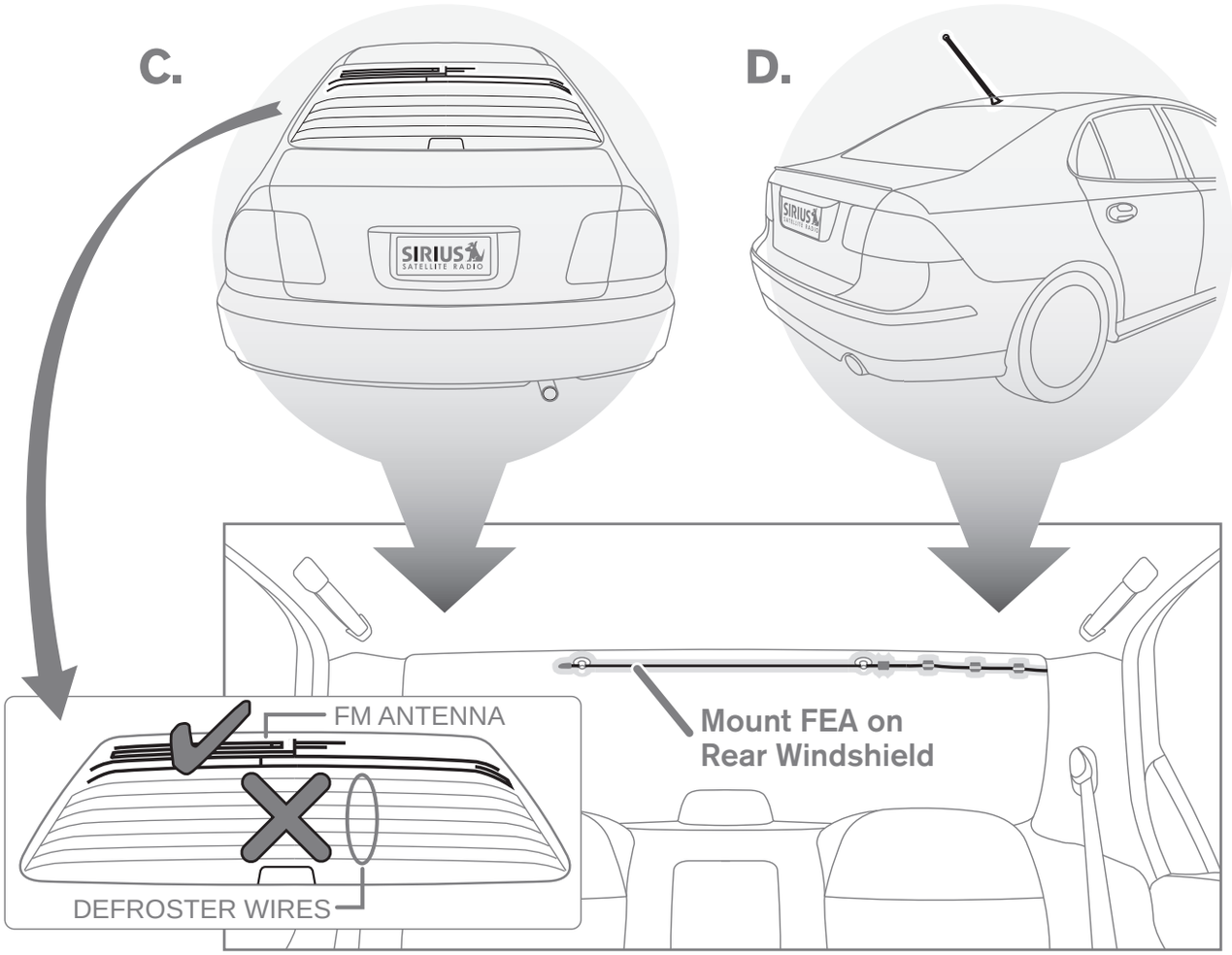


Figure 26

Mount the FEA horizontally along the top edge of the rear windshield (see *Figure 26*). For vehicles with a rooftop antenna, center the FEA below the antenna whip. For vehicles with an in-glass antenna, the FEA should be directly over one of the FM antenna's wires. **Note: *Do not install the FEA over the defroster wires* (see inset on *Figure 26*).** Clean the suction cup mounting areas with the alcohol swab. The FEA wire between the two suction cups should be pulled taut, and as straight as possible, and should not obstruct the driver's view.

For vehicles with an E type FM antenna:

- Whip/aerial mounted on the rear fender or trunk

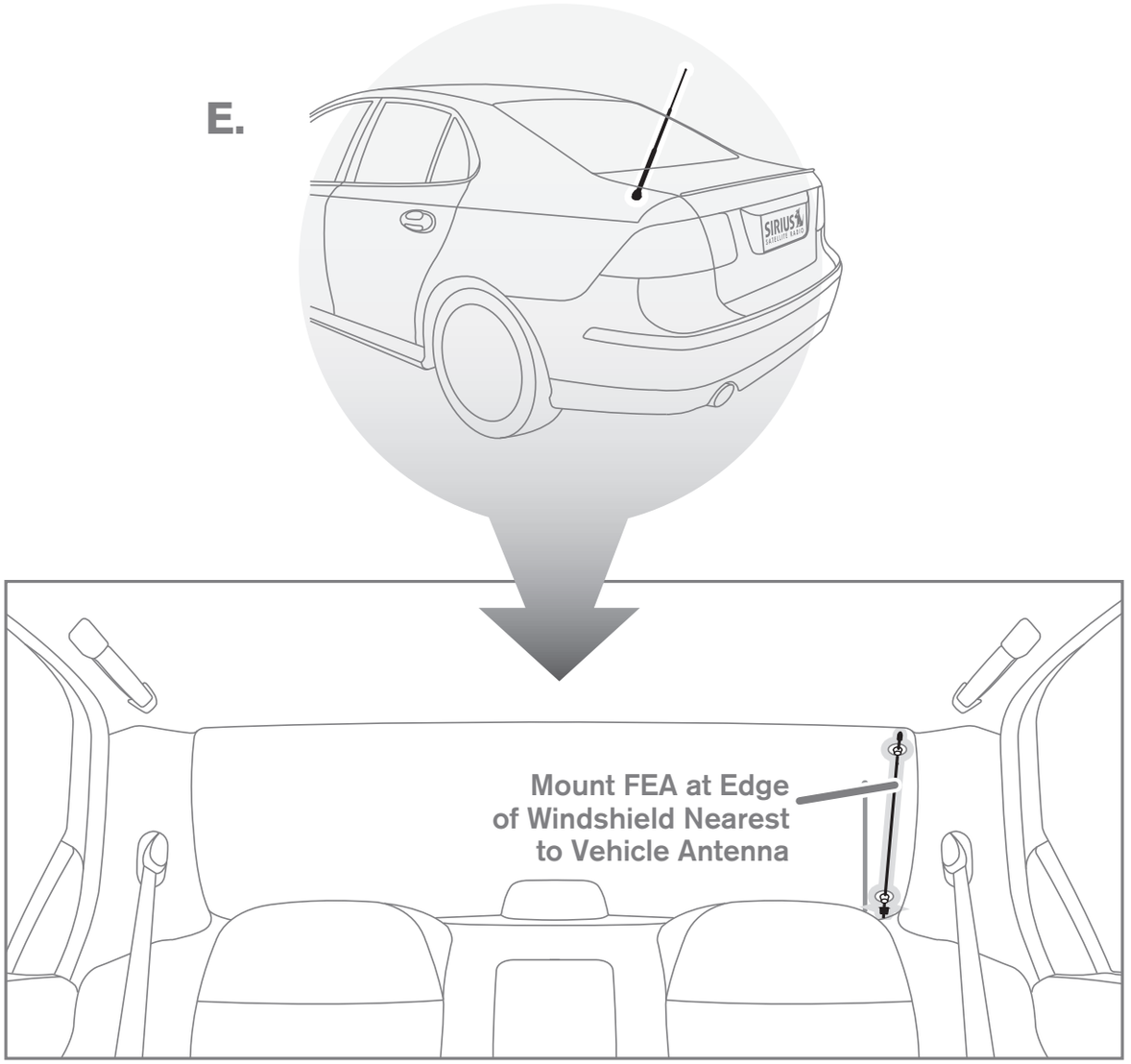


Figure 27

Mount the FEA vertically on the rear windshield at the edge of the glass, on the same side as the vehicle's antenna (i.e. nearest to the antenna). See *Figure 27*. Clean the suction cup mounting areas with the alcohol swab. The FEA wire between the two suction cups should be pulled taut, and as straight as possible, and should not obstruct the driver's view.

For vehicles with F or G type FM antennas:

- Whip/aerial mounted on the front part of roof
- In-glass, in the front windshield

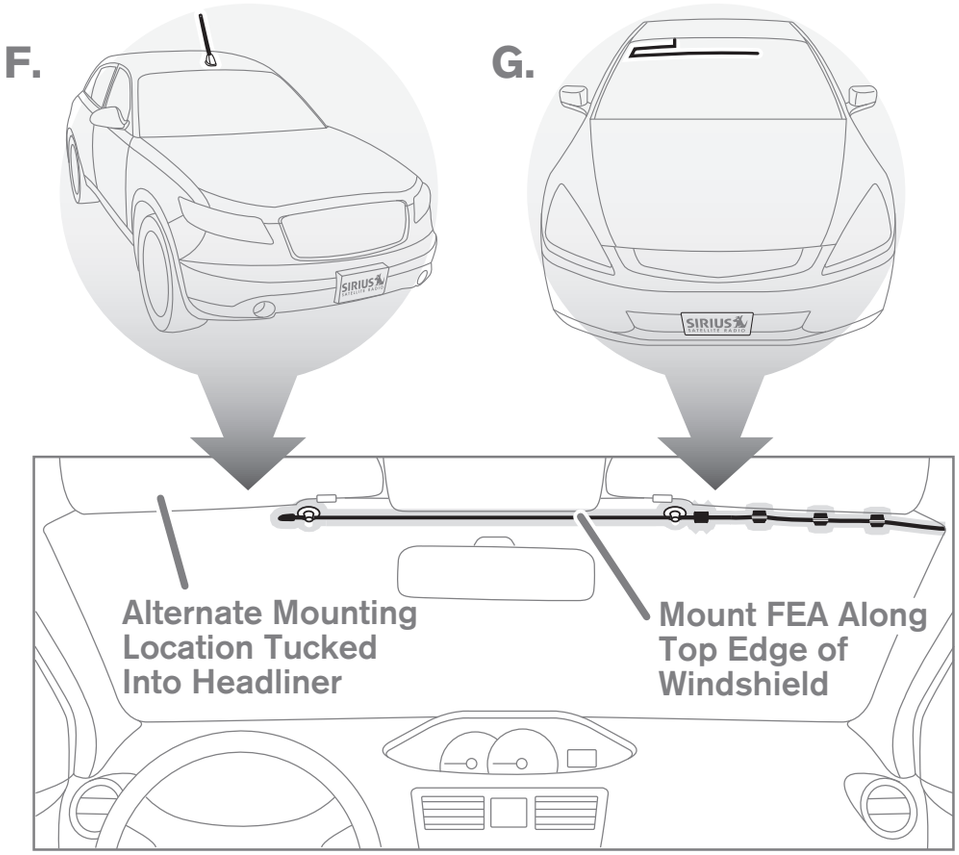


Figure 28

Mount the FEA horizontally along the top edge of the front windshield or install it into the headliner of the vehicle just above the front windshield (see *Figure 28*). For vehicles with a rooftop antenna, center the FEA below the antenna whip. For vehicles with an in-glass antenna, the FEA should be directly over the antenna wire itself. Clean the suction cup mounting areas with the alcohol swab. The FEA wire between the two suction cups should be pulled taut, and as straight as possible, and should not obstruct the driver's view.

Caution: In some states it may not be legal to put the FEA on the windshield, so the FEA should be installed into the headliner. Remove the suction cups and tuck the wire into the headliner, stretched taut and straight.

For vehicles with an H type FM antenna:

- In-glass, in a rear side window

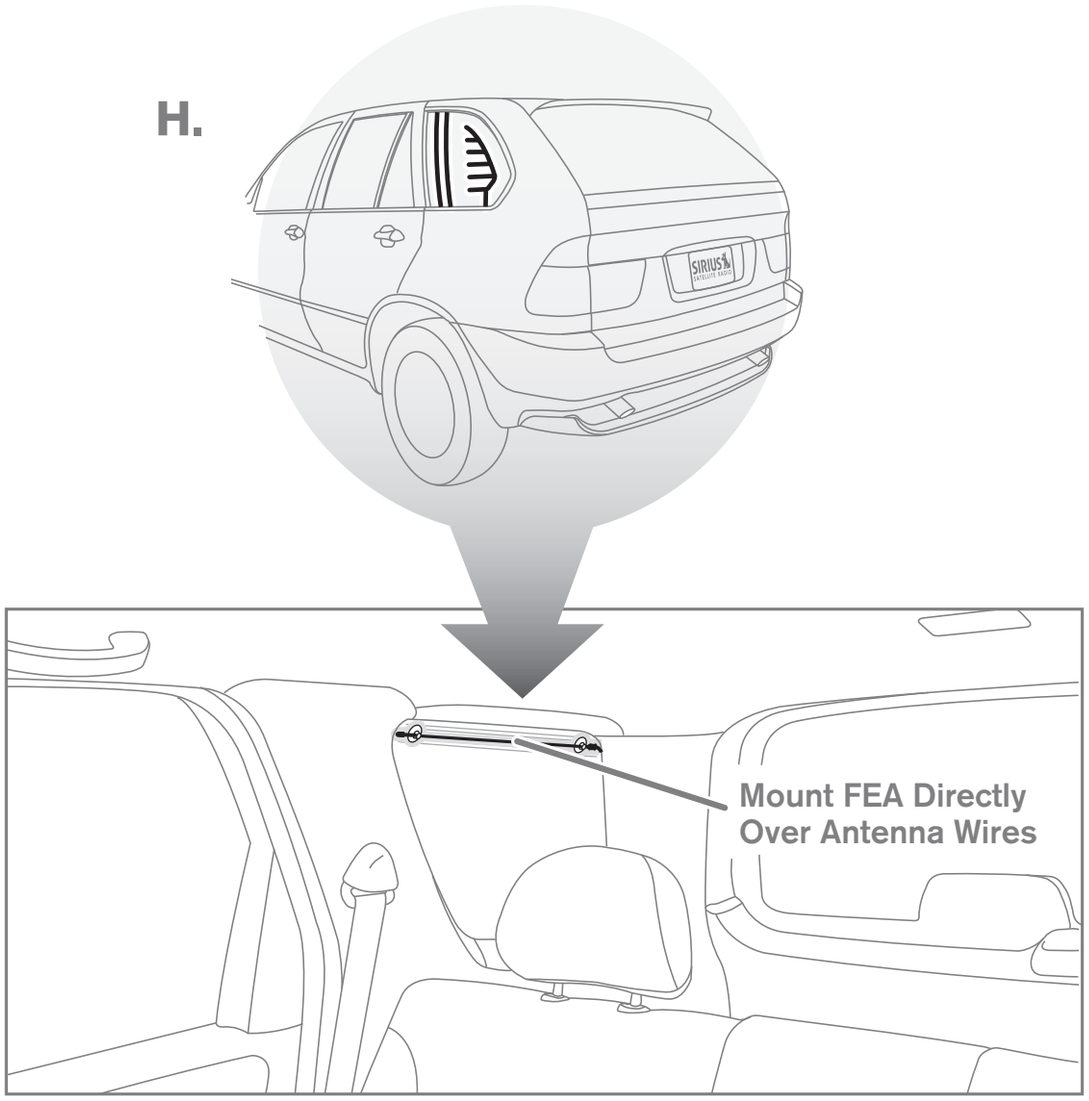


Figure 29

Mount the FEA directly over the in-glass antenna wires. If the antenna wires are vertical, mount the FEA vertically on the glass; if the in-glass antenna wires are horizontal, mount the FEA horizontally on the glass. (See *Figure 29*.) Clean the suction cup mounting areas with the alcohol swab. The FEA wire between the two suction cups should be pulled taut, and as straight as possible, and should not obstruct the driver's view.

Step 4: Temporarily plug the FEA into the InV2's FM OUT connector

See *Figure 30*.

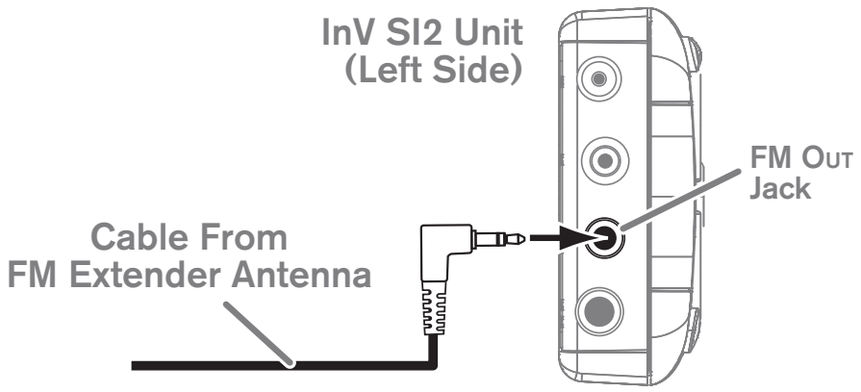


Figure 30

Step 5: Tune your vehicle's FM radio to an FM channel that's not being used in your area

Use your vehicle radio's *Tune* function (not the *Scan* function) to find an FM channel (between 88.1MHz and 107.9MHz) that is not broadcasting in your area. If you're not sure which FM channels are not broadcasting in your home or travel cities, you can also go to **http://sirius.com/fmchannel** and search for a suggested FM channel based on your zip code.

- Once you have located an FM channel that is not broadcasting in your area, save it as a preset on your vehicle radio. This will become your SIRIUS preset.

Step 6: Set Your SIRIUS InV2's FM transmitter to the same FM channel

a. Dock your SIRIUS receiver and turn its power ON. Wait for the *Channel Update* to finish before pressing any buttons.

b. Press and hold the FM PRESETS button. The InV2's display will show the FM1 preset frequency (see *Figure 31*).

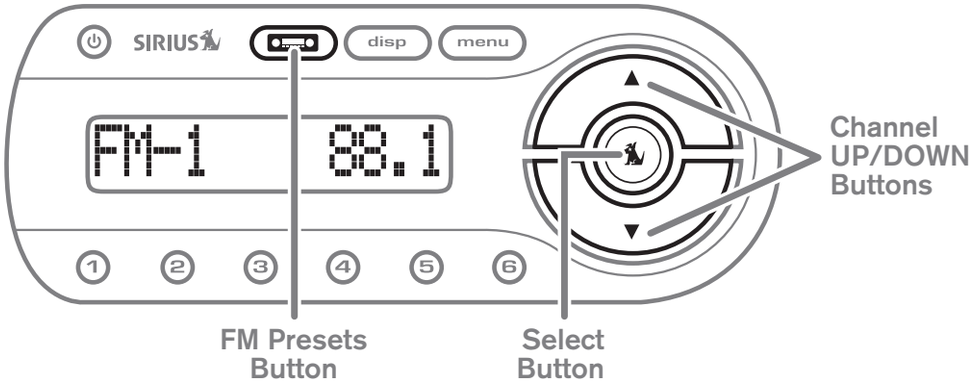


Figure 31

Note: FM1 is factory-set to 88.1MHz. This may not be the best frequency for your area.

c. Press the Select button to select the FM1 preset.

d. Use the Channel UP/DOWN buttons to browse-through the different FM channels until the channel you saved as a preset in *Step 5* on page 52 appears (see *Figure 32*).

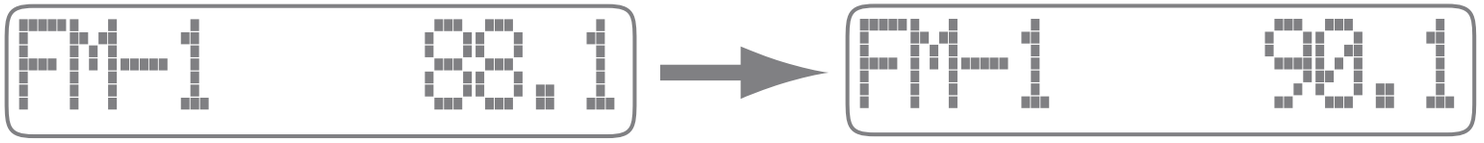


Figure 32

e. Press the Select button. The new channel will now be the FM1 preset.

To listen to your SIRIUS radio, turn your SIRIUS radio ON, then turn your vehicle's FM radio ON and press the SIRIUS preset you set in *Step 5,* on page 52. You should hear your SIRIUS radio through your vehicle's FM radio.

Step 7: Optimize the placement of the FEA

1. Mute the volume of your InV2. (Press the MENU button, then select AUDIO LEVEL and turn the volume down to zero. See *Audio Level*, on page 69.) Note, your SIRIUS radio is still ON.
2. Turn up the volume of your vehicle's FM radio. If you hear static or interference adjust the position of the FEA until the static or interference is eliminated or minimized (see *Figure 33*).

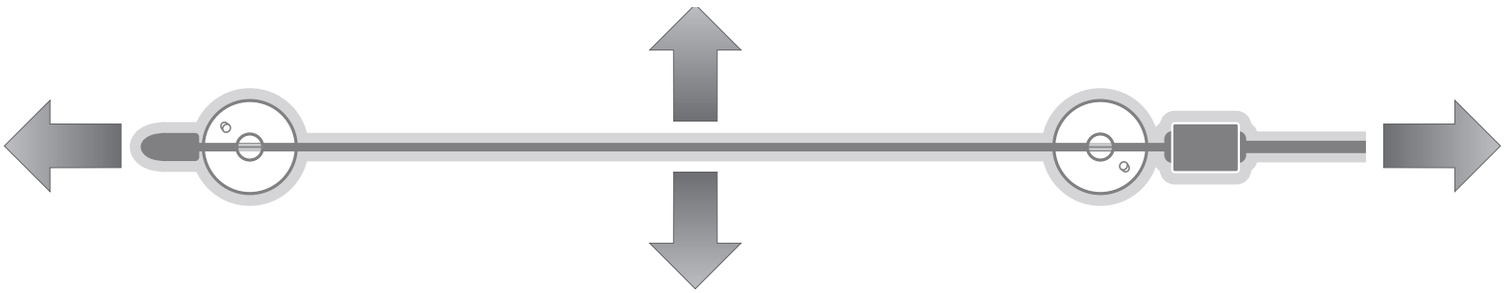


Figure 33

3. If the level of static or interference is still high, please select another FM channel by repeating Steps 5 & 6, on pages 52 – 53.

Step 8: Permanently install the FEA

Note: If you are mounting the FEA in the vehicle's headliner, skip this step.

When you are satisfied with the FEA's mounting location, remove the suction cup mounts and peel the backing off the bead and arrow adhesive mounts. Clean the area where the FEA will be attached with the alcohol swab. Permanently adhere the FEA in the same position on the glass (or A-pillar), making certain the wire is taut and is as straight as possible (see *Figure 34*). If necessary, use the cable guides to hold the cable.

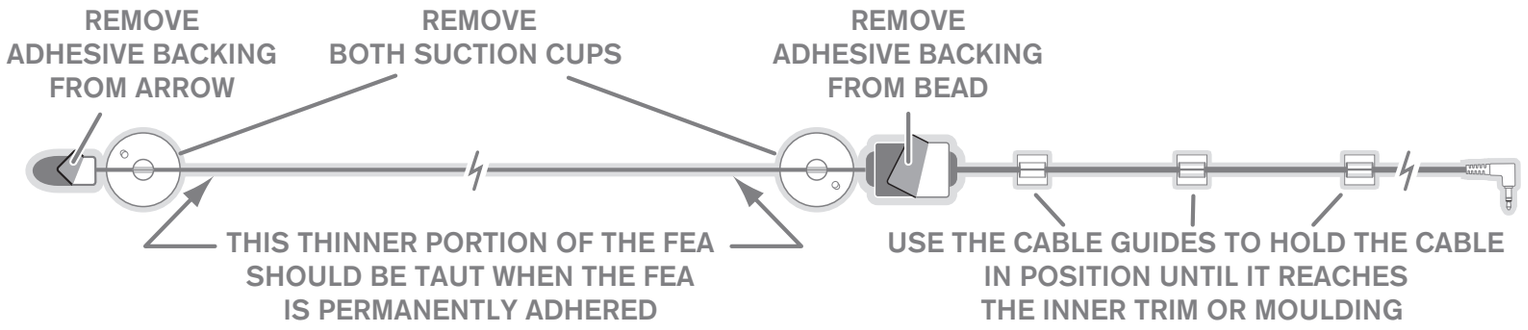

REMOVE ADHESIVE BACKING FROM ARROW
REMOVE BOTH SUCTION CUPS
REMOVE ADHESIVE BACKING FROM BEAD
THIS THINNER PORTION OF THE FEA SHOULD BE TAUT WHEN THE FEA IS PERMANENTLY ADHERED
USE THE CABLE GUIDES TO HOLD THE CABLE IN POSITION UNTIL IT REACHES THE INNER TRIM OR MOULDING

Figure 34

Step 9: Route and hide the cable through the vehicle to the Vehicle Dock

Hide the FEA cable by properly routing it to your SIRIUS Vehicle Dock (see *Figure 35*). Use the cable guides to hold the cable in place until it reaches the inner trim or moulding at the edge of the window. Take advantage of any existing cable channel or wiring conduit and route the cable around the passenger compartment to the Vehicle Dock. Take care not pull the cable across sharp edges that could damage it, and keep it away from areas where it might entangle feet. Coil and secure any excess antenna cable in a location where it can be hidden and secured (such as under the carpet or floor mat).

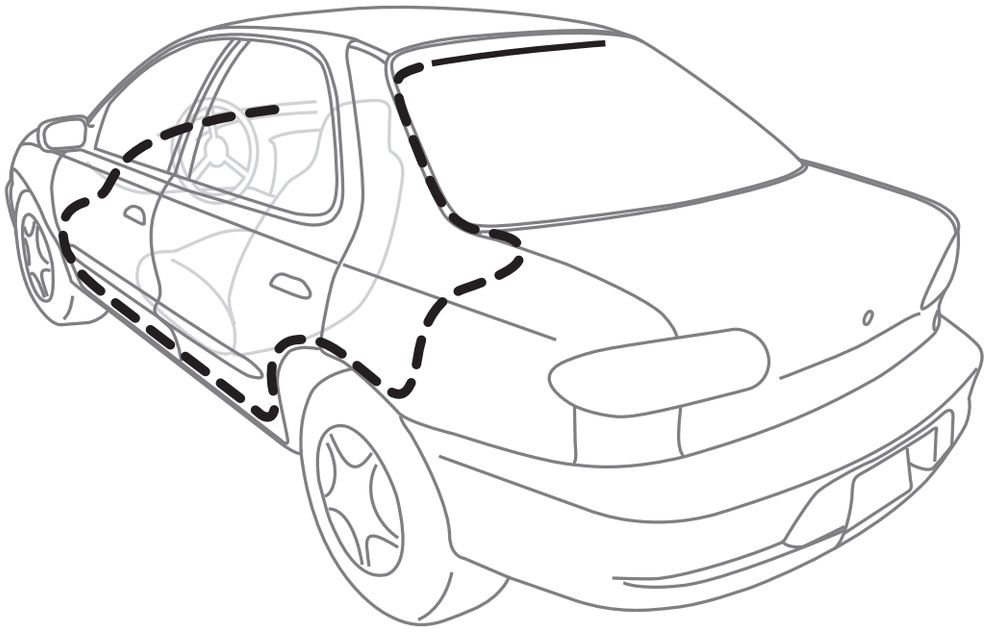


Figure 35

Plug the FEA cable into the Vehicle Dock's FM OUT connector (see *Figure 30*, on page 52).

Appendix A: Tips for Identifying the FM Antenna

Correctly identifying your vehicle's FM antenna is a key to successfully installing the FEA. The preceding installation section already showed you the different kinds of FM antennas found on vehicles. However, there are several types of antennas found on vehicles that you may at first believe to be the FM antenna but which in reality are not. Instead they may actually be GPS, OnStar®, cell phone, factory-installed satellite radio antennas, or another type of antenna.

Please be aware of the following when identifying your vehicle's FM antenna:

1. Puck-type antennas and shark-fin type antennas are ***never*** the FM antenna. *Figure 36* shows several types of these antennas which should not be mistaken for an FM antenna. If you have located one of these types of antennas on your vehicle you can be certain that it's ***not*** the FM antenna. Continue your search to find the actual FM antenna.

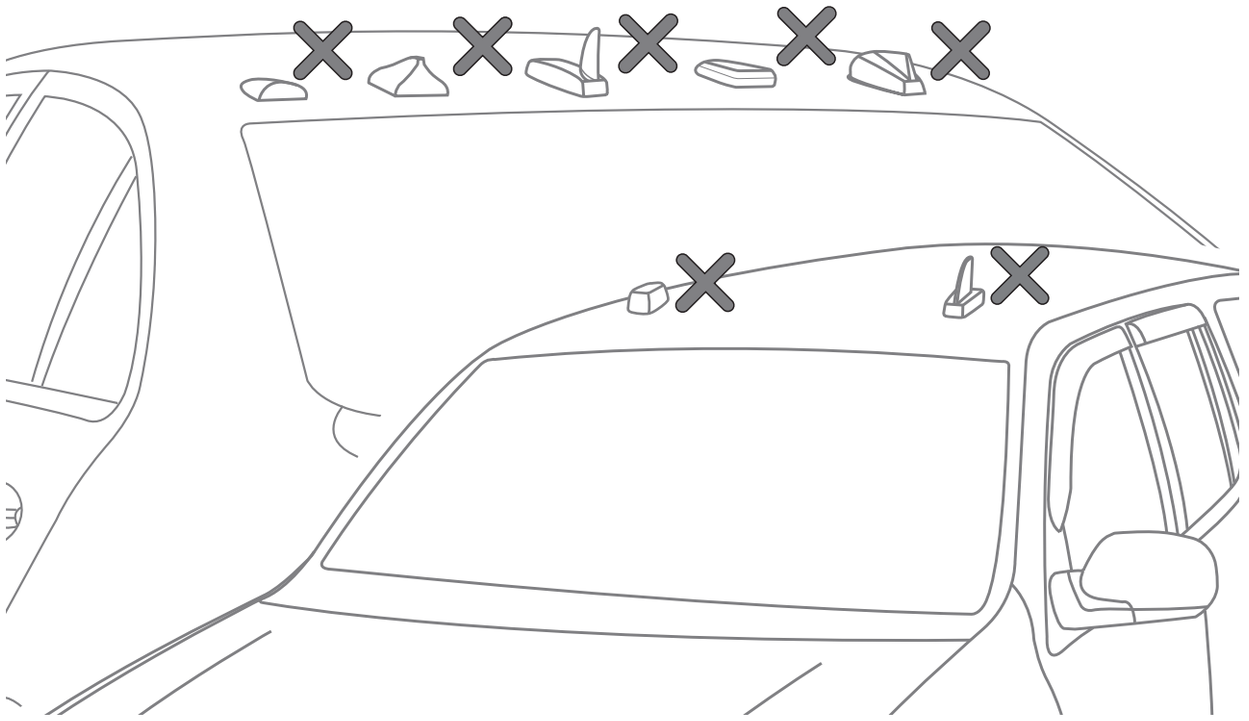


Figure 36

2. Greater confusion may arise with whip type antennas. *Figure 37* shows some whip type antennas which can be found on the front or rear of a vehicle's roof, or on the rear windshield. Some of these antennas could be the FM antenna and some are not the FM antenna.

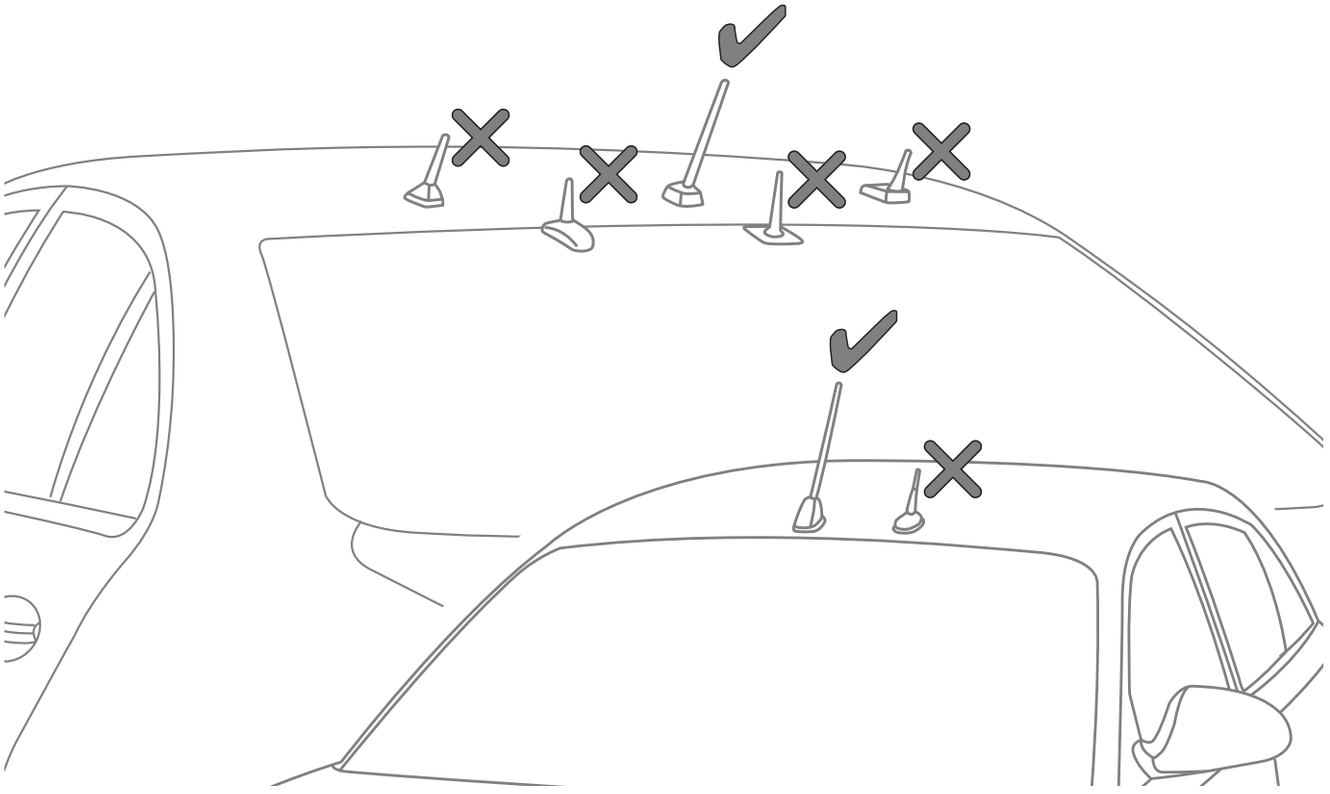


Figure 37

3. Antennas with a short 2-4 inch stubby whip or protrusion are ***not*** FM antennas, while antennas with a whip length of 7 inches or longer are likely to be the FM antenna. If your vehicle has a short stubby antenna, you should continue searching your vehicle's FM antenna.

If after searching your vehicle you're still uncertain as to where its FM antenna is located then SIRIUS recommends professional installation of the FM Extender Antenna. Ask your SIRIUS retailer if they provide professional installation services, or can recommend a professional installer.

If you don't correctly identify your vehicle's FM antenna, the installation of the FEA will result in poor performance and unsatisfactory results.

Subscribing to the SIRIUS Service

Before you can listen to the SIRIUS service, you need to subscribe to the SIRIUS Satellite Radio service. To subscribe, do the following:

1. Be sure that your SIRIUS InV2 is correctly installed, is properly docked in the Vehicle Dock, and that the antenna is oriented to receive the SIRIUS signal.
2. Turn on the InV2. After the startup sequence, it will update the SIRIUS channel line-up (see *Figure 38a*). Wait until the channel updates have completed before pressing any buttons.
3. Once the channels have been updated, the radio will automatically tune to channel 184 and the display will change to *Call 1-888-539-SIRIUS to Subscribe* (see *Figure 38b*). You will not be able to listen to any other channels until you activate your SIRIUS subscription.
4. Use the Channel UP/DOWN buttons to tune to channel 0 to display your InV2's unique 12-digit SIRIUS ID Number (SID). See *Figure 38c*. Write the SID number down.
   - The SID number is also available on your InV2's packaging,
5. Have your credit card handy and contact SIRIUS on the Internet at: **https://activate.siriusradio.com/** and follow the prompts to activate your subscription. You can also call SIRIUS toll-free at: **1-888-539-SIRIUS** (1-888-539-7474).
6. When you have successfully subscribed to the SIRIUS service your InV2 will display UPDATED (see *Figure 38d*). To continue, press any button.

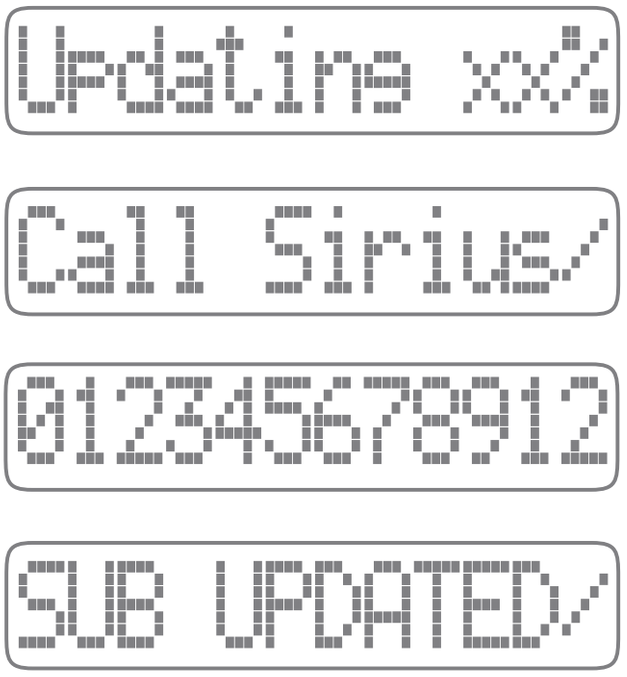


Figure 38

You are now ready to begin enjoying SIRIUS Satellite Radio's digital entertainment, and can tune to other channels!

Controls

SIRIUS InV2 Front Panel and Connections

Figure 39 and the section following identify and describe the SIRIUS InV2's buttons, controls and connections.

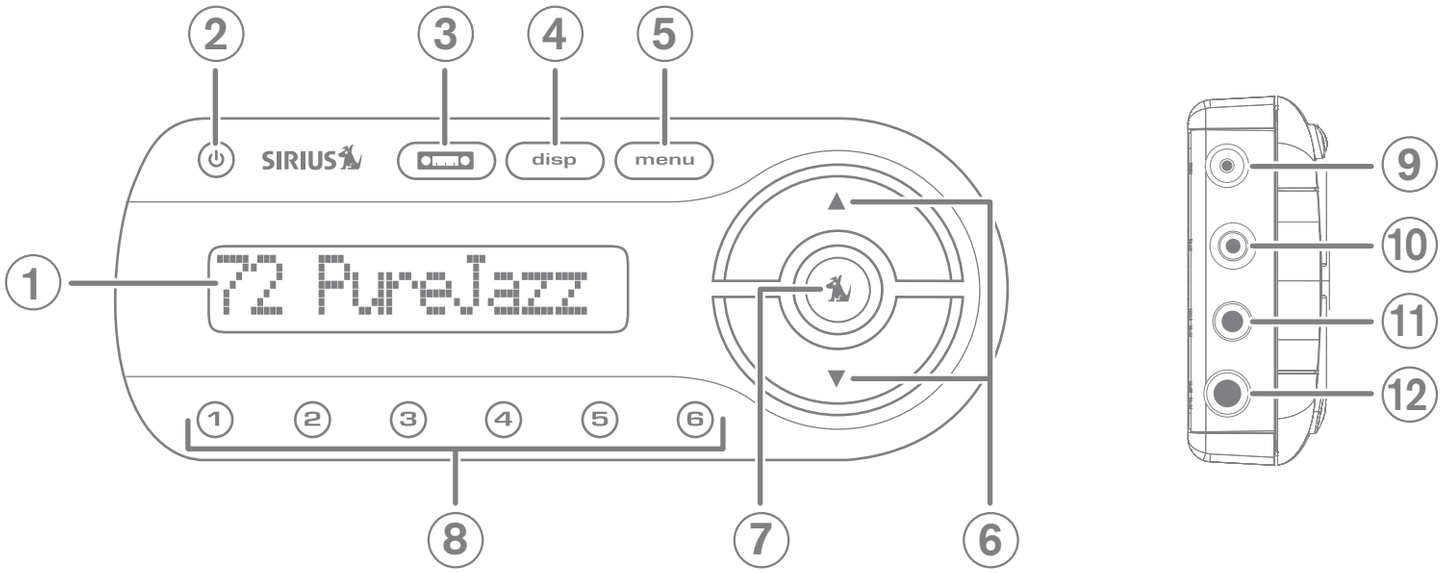


Figure 39

1. **LCD Display:** Displays information about the InV2's operation and about the program that is playing.
2. **Power Button:** Turns the radio's power ON and OFF.
3. **FM Presets Button:** Selects between different preset frequencies used by the built-in wireless FM transmitter.

4. **Display (DISP) Button:** Pressing the DISP button toggles the display between the following modes:
   - Channel Number and Channel Name
   - Channel Number and Artist Name
   - Channel Number and Song Title
   - Channel Number and Artist Name/Song Title
   - Channel Number and Category Name

   Pressing and holding the DISP button activates the Display Brightness menu mode, allowing you to use the Channel UP/DOWN buttons to adjust the LCD display's brightness (see *Brightness and Contrast*, on page 69).
5. **MENU Button:** Accesses Menu Options to make setup and feature changes. Pressing and holding while in any menu screen exits the Menu Options completely and returns to the Default display screen.
6. **Channel UP/DOWN Buttons:** Press to tune to the next higher or lower channel. Press-and-hold to change channels up or down in increments of 10.
7. **Select Button:** Selects items highlighted on the display screen. When the Default screen is displayed, pressing and holding the Select button returns to the previous channel played.
8. **Preset Buttons (1 – 6):** Set and select preset channels.
9. **DC5V Power Connector**: Power connection for the supplied cigarette lighter adapter (see page 33).
10. **Antenna (ANT) Connector**: Connection for the supplied magnetic antenna (see page 33).
11. **FM OUT Connector**: FM output for use with the optional FM Direct Adapter (see page 37).
12. **AUDIO OUT Connector**: Audio output for directly connecting to your vehicle's audio system (see pages 36 & 38).

Operation

Display Screen Information

Whenever you power your InV2 ON, the channel that was playing last will automatically begin playing, and the LCD display screen will show the currently-tuned channel number along with either the channel name, artist name, song title, artist name/song title or the category name. Pressing the DISP button cycles the display between the different modes (see *Figure 40*). This screen is referred to as the *Default* screen in this manual.

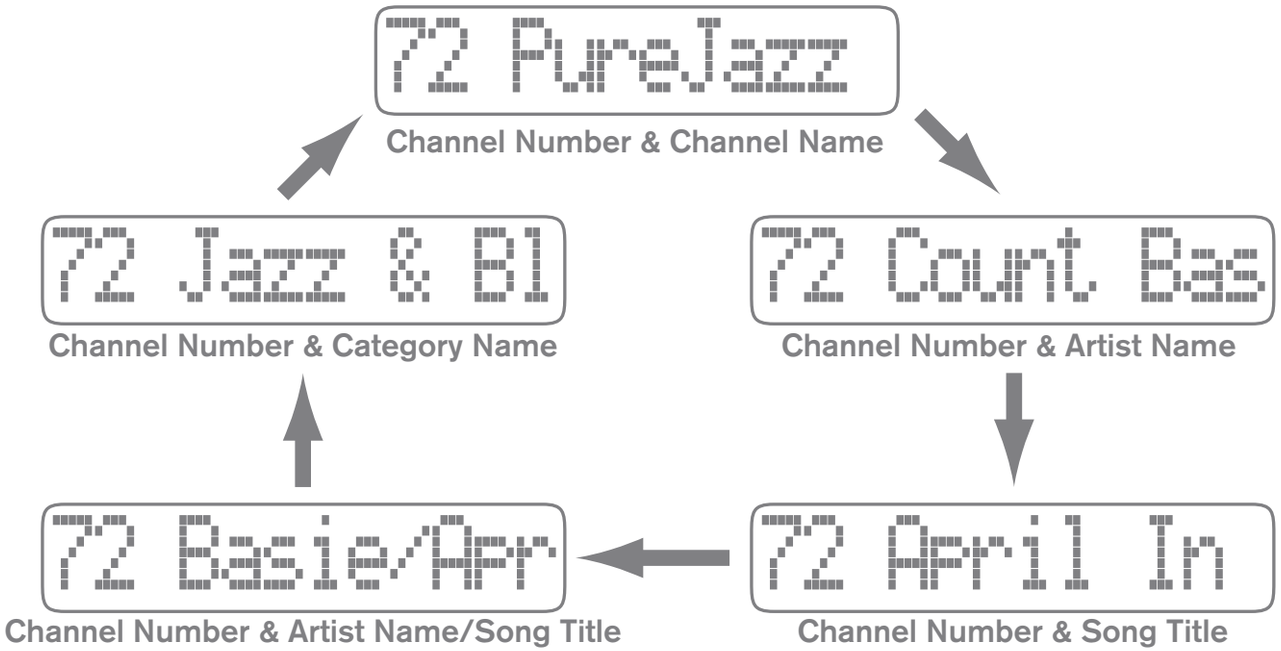

72 PureJazz
Channel Number & Channel Name
72 Count Bas
Channel Number & Artist Name
72 April In
Channel Number & Song Title
72 Basie/Arr
Channel Number & Artist Name/Song Title
72 Jazz & Bl
Channel Number & Category Name

Figure 40

Note: Information (such as artist names and song titles) that is too large to fit on the display in its entirety will scroll from right to left.

Changing Channels

Pressing the Channel UP or DOWN button will immediately tune to the next or previous channel. Pressing and holding the Channel UP or DOWN button will immediately skip up or down by 10 channels. Pressing and holding the Select button will return to the channel that was playing immediately before the current channel.

Channel Presets

You can store up to 6 of your favorite channels as presets for quick access by pressing the 1 – 6 buttons.

Storing Channel Presets

To store a favorite channel as a preset, do the following:

1. Tune the InV2 to the channel you want to store as a preset.
2. Press and hold for 1 second the numbered preset button (1 – 6) in which you want to store the channel. You will hear an audible beep and the channel number on the display will flash to confirm that the channel has been stored as a preset.

Note: If the preset button already has a channel stored in it, the newly-stored channel will replace the original preset.

Selecting Presets

To tune to a preset channel, press and release one of the 1 – 6 buttons. If you press a preset button in which no channel has been saved, a *PRESET EMPTY* message will be displayed (see *Figure 41*).

Figure 41

FM Preset Button

If you are using a wireless connection between your SIRIUS InV2 and your vehicle's audio system (see page 39), the FM Preset button makes it easy to select between the InV2's five different preset FM transmitter frequencies or select new FM transmitter preset frequencies without having to go through the Menu Options.

Pressing the FM Preset button while the Default screen is active will display the current preset FM transmitter frequency (see *Figure 42*, left). Pressing the FM Preset button again will change to the next preset FM transmitter frequency (see *Figure 42*, right)

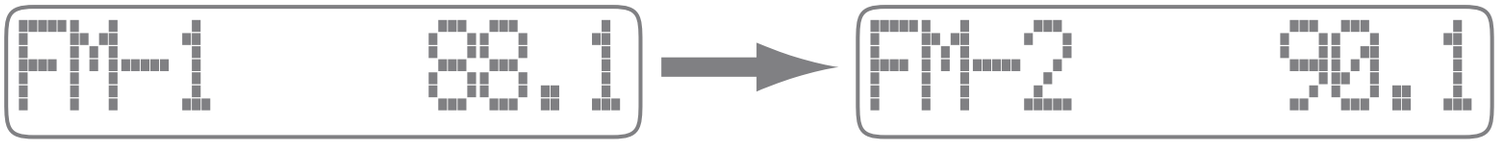


Figure 42

Pressing and holding the FM Preset button will go directly to the Menu Options FM PRESETS screen (see page 67).

Menu Options

Menu Options allows you to set and/or change your SIRIUS InV2's various features and settings. The following settings are available in the Menu Options:

- SIRIUS ID
- FM Presets
- FM Transmit
- Brightness
- Contrast
- Audio Level
- Tones
- Channel Lock
- Edit Code
- Signal
- Factory Set

Pressing and releasing the MENU button displays the SIRIUS ID screen (see *Figure 43*, on page 66). While the SIRIUS ID screen is active, use the Channel UP/DOWN buttons to scroll to the next or previous menu item and press the Select button to select it. If you don't make a selection within 10 seconds the InV2 will exit the Menu Options and revert to the Default display screen. Pressing the MENU button anywhere in the menu system will revert to the previous Menu screen; pressing and holding the MENU button will exit the Menu Options and return to the Default display screen.

SIRIUS ID

This displays your InV2's 12-digit SIRIUS ID (SID) number (see *Figure 43*).

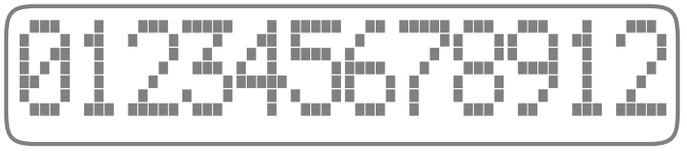


Figure 43

The SID is unique to each SIRIUS radio, and is required to activate your service. We recommend that you write this number in the space provided near the end of this user guide. No adjustments are allowed in this mode. To exit, press the MENU button.

FM Presets

The FM PRESETS Menu Option lets you set or change the InV2's built-in FM transmitter preset frequencies. You can set up to 5 different FM preset frequencies.

1. When the FM PRESETS screen is displayed, press the Select button. The FM1 preset will be displayed (see *Figure 44*, left). Pressing the Channel UP/DOWN buttons will cycle-through the five FM presets (see *Figure 44*, right). When the preset you want is displayed, press the Select button.

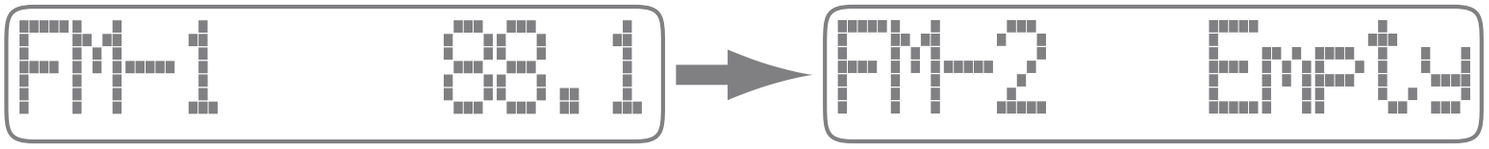


Figure 44

Note: The factory default setting for the FM-1 preset is 88.1MHz. This may not be the best frequency for your area.

2. To change that preset's FM frequency, use the Channel UP/DOWN buttons to highlight a different FM frequency (see *Figure 45*). When the frequency you want is displayed, press the Select button.

Figure 45

3. Repeat *Steps 1 – 2* for as many FM presets as you wish.

If you frequently travel to different areas, you can set the five FM presets to frequencies that are not being used by broadcasters in different areas.

FM Transmit

The FM TRANSMIT menu option (see *Figure 46*) allows you to turn the the InV2's built-in FM transmitter ON and OFF.

Figure 46

1. Pressing the Select button displays the FM ON screen (see *Figure 47*, left).

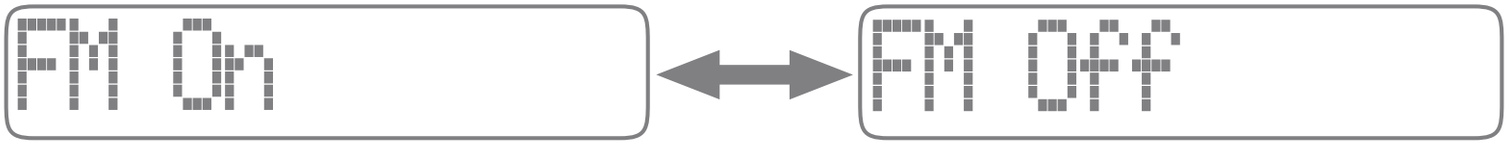


Figure 47

2. Use the Channel UP/DOWN buttons to toggle between FM ON and FM OFF (see *Figure 47*, right).
3. When the option you want is displayed, press the Select button.

Brightness and Contrast

Brightness adjusts the overall intensity of the LCD display to help with viewing in different lighting conditions. *Contrast* adjusts the relationship between the background and the text on the LCD display.

Pressing the Select button from the BRIGHTNESS or CONTRAST menu option (see *Figure 48*, left) displays a 10-segment horizontal bar graph (see *Figure 48*, right).

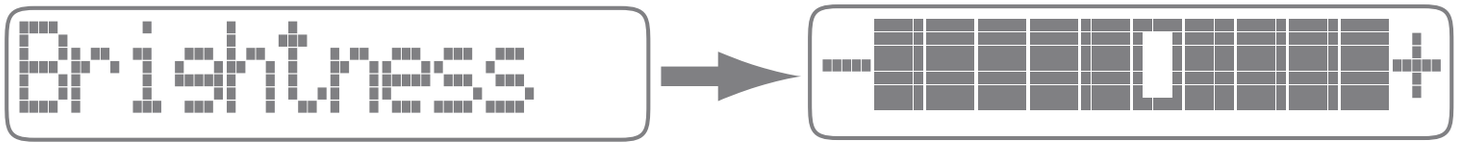


Figure 48

Use the Channel UP/DOWN buttons to adjust the display's brightness or contrast. The bar graph will indicate the change. When you're finished, press the Select button to save the change.

Audio Level

Selecting the AUDIO LEVEL menu option (see *Figure 49*, left) displays a 10-segment horizontal bar graph (see *Figure 49*, right).

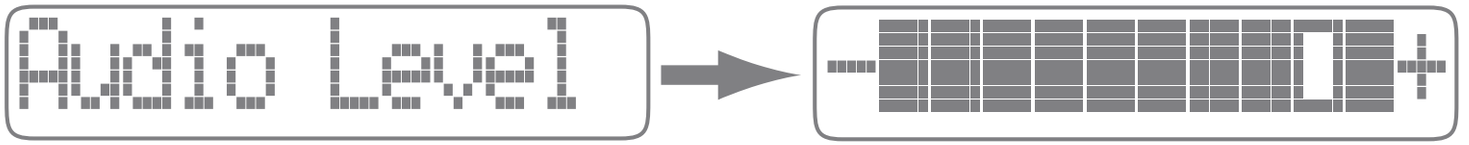


Figure 49

Use the Channel UP/DOWN buttons to adjust the InV2's audio volume level. The bar graph will indicate the change. When you're finished, press the Select button to save the change.

Tones

The TONES menu option (see *Figure 50*) lets you select whether to hear an audible confirmation tone as you navigate menus and lists.

Figure 50

1. From the TONES screen, press the Select button, and use the Channel UP/DOWN buttons to toggle between BEEP ON and BEEP OFF (see *Figure 51*).

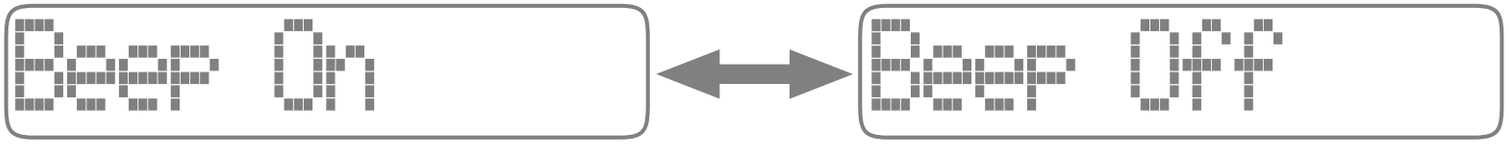


Figure 51

2. When the option you want is displayed, press the Select button.

Channel Lock

Your SIRIUS InV2 has the ability to lock channels you do not want others (such as children) to access without your permission. When browsing channels with the Channel UP/DOWN buttons, channels that are locked will have a lock icon next to their channel number (see *Figure 52*). When the anyone tries to tune to a locked channel, an ENTER CODE screen will be displayed and the channel won't be accessed until the correct 4-digit code number is entered.

Figure 52

1. Select the CHANNEL LOCK menu option. The LOCK/UNLOCK screen will appear (see *Figure 53*).

Figure 53

2. **To lock or unlock a channel,** press the Select button:
   a. The first time you access the LOCK/UNLOCK menu, you must enter the default lock code. The default lock code is **1 1 1 1**. Use the Preset buttons to enter the code number and press the Select button to set it.
   b. After entering the code, a list of channels will appear.
   c. Use the Channel UP/DOWN buttons to navigate to the channel you want to lock or unlock. When the channel is displayed, press the Select button to lock or unlock it. Locked channels will have a lock icon displayed next to their names (see *Figure 49*). Press the MENU button to save your locked/unlocked channels.

To change the lock code from **1 1 1 1**, see *Edit Code*, on page 72.

Edit Code

The EDIT CODE menu option allows you to change the Lock Code.

1. When the Edit Code screen is displayed, press the Select button. The ENTER# screen (see *Figure 54*, left) will appear.

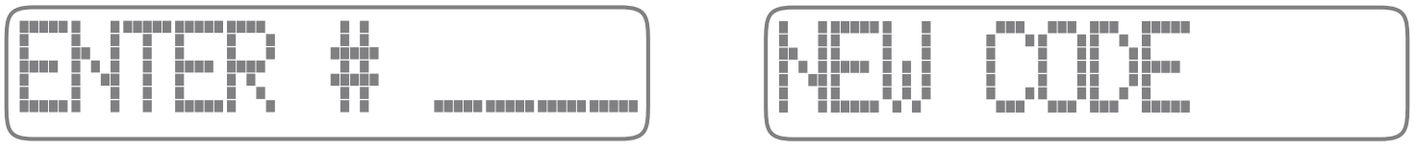


Figure 54

2. Use the Preset buttons to enter the 4-digit code number and press the Select button. The NEW CODE screen will appear (see *Figure 54*, right).
3. Use the Preset buttons to enter a new 4-digit code number and press the Select button.
4. You will be prompted to confirm the code (see *Figure 55*, left). Use the Preset buttons to re-enter the new code number and press the Select button. A confirmation screen will appear (see *Figure 55,* right).

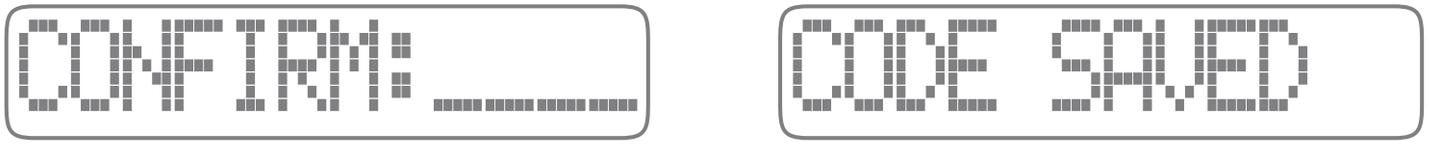


Figure 55

Note: If you have forgotten your Channel Lock code, call SIRIUS Customer Service for help.

Signal

When using the optional Home Docking Station or Boombox indoors, it is important to aim the SIRIUS antenna for maximum signal reception. The SIGNAL screens visually show the strength of the satellite and terrestrial signals being received by the InV2. (Refer to the Home Docking Station installation guide for more information about properly orienting the antenna.)

Select the SIGNAL menu option and press the Select button. The signal strength screen will be displayed (see *Figure 56*). The 'S' bar graph indicates the strength of the SIRIUS satellite signal; the 'T' bar graph indicates the strength of the SIRIUS terrestrial signal (if available).

Figure 56

Factory Set

The *Factory Set* menu option will restore most every feature of the radio to the original factory settings. The following is a list of all features affected by the *Factory Set* option:

- All Channel Presets are cleared
- FM Transmitter set to ON
- FM Transmitter Preset #1 set to 88.1 MHz
- Display brightness set to 50%
- Display Contrast set to 50%
- Audio level set to -3dB
- Confirmation Tone set to ON

Note that the Channel Lock feature is not affected by the Factory Set option. If a code has been set for the Channel Lock feature, the code will not be reset by the Factory Set feature, preventing someone from circumventing the Channel Lock feature. Channels which have been locked will remain locked.

To activate the *Factory Set* feature, and restore the above features to their factory settings, do the following:

1. Use the Channel UP/DOWN buttons to display the FACTORY SET menu option, then press the Select button.
2. Press the Channel UP/DOWN buttons to toggle between the RESTORE? Y(ES) and RESTORE? N(O) screens (see *Figure 57*). When the RESTORE? Y(ES) screen appears, press the Select button.

Figure 57

- If you do not want to restore the InV2 to its factory settings, press the Select button when the RESTORE? N(O) screen appears. You will be taken back to the MENU OPTIONS screen.

3. The SURE? YES screen (*Figure 58*, left) will be displayed. Press the Select button to restore the factory settings. The RESTORING screen will appear (see *Figure 58* , right).

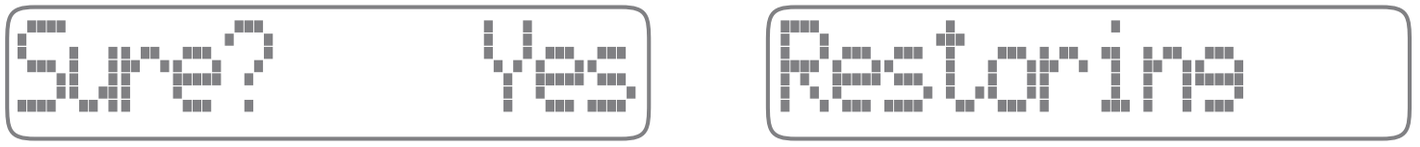


Figure 58

- If you do not want to restore the InV2 to its factory settings, press and hold the MENU button to return to the Default screen.

When the restore is complete, the InV2 will tune to the last channel that was active before the *Factory Set* was begun.

Troubleshooting

Symptom	Solution
The InV2 does not power ON	Blown fuse, or the power cable is not properly connected. • Check for a bad fuse and check power cable connection
Display reads: *No Antenna*	The satellite antenna is not connected to the radio. • Check the satellite antenna connection to the radio.
Display reads: *No Signal*	No satellite signal is being received. • Check for obstacles over or around the satellite antenna. • Change the vehicle location to eliminate nearby obstacles (bridges, overpasses, tress, buildings, etc.).
Audio static or loss of clarity	The FM frequency contains static. • Locate a quiet FM frequency on your vehicle radio and set the InV2's FM transmitter frequency to match. • If using the InV2's AUDIO OUT connector, check the cable connections.
No sound	The audio cables are not connected, or the vehicle's FM radio is set to the wrong frequency. • Check the audio cables at the InV2 and the vehicle's audio system. • Tune the vehicle's FM radio to the same FM frequency the InV2's FM transmitter is tuned.

Specifications

Satellite Frequencies	2322.293/2330.207 MHz
Terrestrial Frequencies	2326.250MHz
Radio Power Requirements	4.9 – 5.6 Volts, Negative Ground, DC
Audio Output	550mVrms (+/- 50mVrms)
Total Harmonic Distortion (THD)	<0.2%
Signal-to-noise (S/N)	Greater than 73dB
Fuse Requirement	2A ATC
Radio Dimensions (Length x Width x Depth)	129.6mm x 45.7mm x 17.8mm (5.1” x 1.8” x 0.7”)
Radio Weight	68.0g (2.4 oz.)
Cigarette Lighter Adapter Power Requirements	9 –16 Volts, Negative Ground, DC
Antenna Type	Low Profile Magnetic
Antenna Cable Length	21’ (single micro-cable)
Antenna Connector Type	SMB (right-angle)
Audio Out Interface	1/8” / 3.5mm Stereo Jack
FM Out Interface	2.5mm Jack

Note: Features and Specifications are subject to change without notice.

SIRIUS ID

Write down the SIRIUS ID (SID) of your SIRIUS InV2 in the space provided below.

SID: _____

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